Civil Engineering Database Subject Heading Index

The **Civil Engineering Database (CEDB)** is designed to provide free, easy bibliographic access to all ASCE publications. The database covers ASCE documents published since 1970. It provides access to all the journals, conference proceedings, books, standards, manuals, magazines, and newspapers. The index terms below were assigned to papers published in this journal during 2008 from a CEDB subject heading list. The CEDB and subject heading list can be accessed on the Web at *http://cedb.asce.org/*.

Accidents

Importance of Exposure Model in Estimating Impacts When a Water Distribution System Is Contaminated — Michael J. Davis and Robert Janke; 134 (5), 449-56 (2008).

Aggregation

Water Distribution System Aggregation for Water Quality Analysis — Lina Perelman and Avi Ostfeld; 134 (3), 303-9 (2008).

Agriculture

Hydrologic and Economic Implications of Climate Change for Typical River Basins of the Agricultural Midwestern United States — Hua Xie, J. Wayland Eheart, and Hyunhee An; 134 (3), 205-13 (2008).

Algorithms

Genetic Algorithm for Constrained Optimization Models and Its Application in Groundwater Resources Management — Jiabao Guan, Elcin Kentel, and Mustafa M. Aral; 134 (1), 64-72 (2008).

Design Optimization of River Sampling Network Using Genetic Algorithms — Huei-Tau Ouyang, Hsin Yu, Chin-Huang Lu, and Yuan-Hong Luo; 134 (1), 83-7 (2008).

Ant Colony Optimization for Least-Cost Design and Operation of Pumping Water Distribution Systems — Avi Ostfeld and Ariel Tubaltzev; 134 (2), 107-18 (2008).

Optimal Design of Water Networks Using a Modified Genetic Algorithm with Reduction in Search Space — Mahendra S. Kadu, Rajesh Gupta, and Pramod R. Bhave; 134 (2), 147-60 (2008).

Optimal Real-Time Operation of Urban Water Distribution Systems Using Reduced Models — Uri Shamir and Elad Salomons; 134 (2), 181-5 (2008).

Optimal Design of Gravity-Fed Looped Water Distribution Networks Considering the Resilience Index — J. Reca, J. Martínez, R. Baños, and C. Gil; 134 (3), 234-8 (2008).

Improved Self-Adaptive Chaotic Genetic Algorithm for Hydrogeneration Scheduling — Xiaohui Yuan, Yongchuan Zhang, and Yanbin Yuan; 134 (4), 319-25 (2008).

Solving Unconfined Groundwater Flow Management Problems with Successive Linear Programming — David P. Ahlfeld and Gemma Baro-Montes; 134 (5), 404-12 (2008).

Efficient Multiobjective Storm Sewer Design Using Cellular Automata and Genetic Algorithm Hybrid — Y. F. Guo, G. A. Walters, S. T. Khu, and E. C. Keedwell; 134 (6), 511-5 (2008).

Efficient Sensor Placement Optimization for Securing Large Water Distribution Networks — Andreas Krause, Jure Leskovec, Carlos Guestrin, Jeanne VanBriesen, and Christos Faloutsos; 134 (6), 516-26 (2008).

Extended Period Simulation Analysis Considering Valve Shutdowns — Orazio Giustolisi, Zoran Kapelan, and Dragan Savic; 134 (6), 527-37 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Aquatic habitats

Spatial Knowledge-Based Decision Analysis System for Pond Site Assessment — Cat Shrier, Darrell Fontane, and Luis Garcia; 134 (1), 14-23 (2008).

Aqueducts

Urban Water Management in Ancient Greece: Legacies and Lessons — D. Koutsoyiannis, N. Zarkadoulas, A. N. Angelakis, and G. Tchobanoglous; 134 (1), 45-54 (2008).

Aquifers

Solving Unconfined Groundwater Flow Management Problems with Successive Linear Programming — David P. Ahlfeld and Gemma Baro-Montes; 134 (5), 404-12 (2008).

Reliability and Remediation Cost of Optimal Remediation Design Considering Uncertainty in Aquifer Parameters — Nak-Youl Ko and Kang-Kun Lee; 134 (5), 413-21 (2008).

Artificial intelligence

Peak Daily Water Demand Forecast Modeling Using Artificial Neural Networks — Jan Franklin Adamowski; 134 (2), 119-28 (2008).

Efficient Multiobjective Storm Sewer Design Using Cellular Automata and Genetic Algorithm Hybrid — Y. F. Guo, G. A. Walters, S. T. Khu, and E. C. Keedwell; 134 (6), 511-5 (2008).

Bacteria

Combining Real-Time Bacteria Models and Uncertainty Analysis for Establishing Health Advisories for Recreational Waters — Matthew G. Heberger, John L. Durant, Kimberly A. Oriel, Paul H. Kirshen, and Lee Minardi; 134 (1), 73-82 (2008).

Barriers

Improving Seawater Barrier Operation with Simulation Optimization in Southern California — Benjamin S. Bray and William W.-G. Yeh; 134 (2), 171-80 (2008).

Best Management Practice

How to Include Economic Analysis in TMDL Allocation — Arjumand Z. Zaidi, Sharon M. deMonsabert, and Raed El-Farhan; 134 (3), 214-23 (2008).

Calibration

Water Quality Model Calibration under Unknown Demands — P. M. R. Jonkergouw, S.-T. Khu, Z. S. Kapelan, and D. A. Savić; 134 (4), 326-36 (2008).

California

Improving Seawater Barrier Operation with Simulation Optimization in Southern California — Benjamin S. Bray and William W.-G. Yeh; 134 (2), 171-80 (2008).

Solving Unconfined Groundwater Flow Management Problems with Successive Linear Programming — David P. Ahlfeld and Gemma Baro-Montes; 134 (5), 404-12 (2008).

Cascade

Reliability-Based Simulation-Optimization Model for Multireservoir Hydropower Systems Operations: Khersan Experience — Raheleh Afzali, Seyed Jamshid Mousavi, and Abbas Ghaheri; 134 (1), 24-33 (2008).

Case reports

Integrating Long- and Short-Term Reservoir Operation Models via Stochastic and Deterministic Optimization: Case Study in Japan — Alcigeimes Batista Celeste, Koichi Suzuki, and Akihiro Kadota; 134 (5), 440-8 (2008).

Channel design

Chance Constrained Optimal Design of Trapezoidal Channels — Amlan Das; 134 (3), 310-3 (2008).

China

Inexact Chance-Constrained Linear Programming Model for Optimal Water Pollution Management at the Watershed Scale — Yong Liu, Huaicheng Guo, Feng Zhou, Xiaosheng Qin, Kai Huang, and Yajuan Yu; 134 (4), 347-56 (2008).

Chlorine

Using Bayesian Statistics to Estimate Chlorine Wall Decay Coefficients for Water Supply System — Jinhui Jeanne Huang and Edward

Arthur McBean; 134 (2), 129-37 (2008).

Clean Water Act

How to Include Economic Analysis in TMDL Allocation — Arjumand Z. Zaidi, Sharon M. deMonsabert, and Raed El-Farhan; 134 (3), 214-23 (2008).

Climatic changes

Hydrologic and Economic Implications of Climate Change for Typical River Basins of the Agricultural Midwestern United States — Hua Xie, J. Wayland Eheart, and Hyunhee An; 134 (3), 205-13 (2008).

Estimating the Impacts and Uncertainty of Climate Change on a Municipal Water Supply System — Matthew W. Wiley and Richard N. Palmer; 134 (3), 239-46 (2008).

Coastal management

Improving Seawater Barrier Operation with Simulation Optimization in Southern California — Benjamin S. Bray and William W.-G. Yeh; 134 (2), 171-80 (2008).

Computation

Design Optimization of River Sampling Network Using Genetic Algorithms — Huei-Tau Ouyang, Hsin Yu, Chin-Huang Lu, and Yuan-Hong Luo; 134 (1), 83-7 (2008).

Improving Seawater Barrier Operation with Simulation Optimization in Southern California — Benjamin S. Bray and William W.-G. Yeh; 134 (2), 171-80 (2008).

Reliability and Remediation Cost of Optimal Remediation Design Considering Uncertainty in Aquifer Parameters — Nak-Youl Ko and Kang-Kun Lee; 134 (5), 413-21 (2008).

Standard Interactive Genetic Algorithm—Comprehensive Optimization Framework for Groundwater Monitoring Design — Meghna Babbar-Sebens and Barbara Minsker; 134 (6), 538-47 (2008).

Computational fluid dynamics technique

Mixing at Cross Junctions in Water Distribution Systems. I: Numerical Study — P. Romero-Gomez, C. K. Ho, and C. Y. Choi; 134 (3), 285-94 (2008).

Computer programming

Optimization of Hedging Rules for Reservoir Operations — Ming-Yen Tu, Nien-Sheng Hsu, Frank T.-C. Tsai, and William W.-G. Yeh; 134 (1), 3-13 (2008).

Inexact Chance-Constrained Linear Programming Model for Optimal Water Pollution Management at the Watershed Scale — Yong Liu, Huaicheng Guo, Feng Zhou, Xiaosheng Qin, Kai Huang, and Yajuan Yu; 134 (4), 347-56 (2008).

Solving Unconfined Groundwater Flow Management Problems with Successive Linear Programming — David P. Ahlfeld and Gemma Baro-Montes; 134 (5), 404-12 (2008).

Conflict

Extended OWA Operator for Group Decision Making on Water Resources Projects — M. Zarghami, R. Ardakanian, A. Memariani, and F. Szidarovszky; 134 (3), 266-75 (2008).

Game Theoretical Approach to Conflict Resolution in Transboundary Water Resources Management — Eleni Eleftheriadou and Yannis Mylopoulos; 134 (5), 466-73 (2008).

Constraints

Genetic Algorithm for Constrained Optimization Models and Its Application in Groundwater Resources Management — Jiabao Guan, Elcin Kentel, and Mustafa M. Aral; 134 (1), 64-72 (2008).

Cross sections

Chance Constrained Optimal Design of Trapezoidal Channels — Amlan Das; 134 (3), 310-3 (2008).

Dams

Urban Water Management in Ancient Greece: Legacies and Lessons — D. Koutsoyiannis, N. Zarkadoulas, A. N. Angelakis, and G. Tchobanoglous; 134 (1), 45-54 (2008).

Adding Radar Rainfall and Calibration to the TR-20 Watershed Model to Improve Dam Removal Flood Analysis — T. Endreny and M. Higgins; 134 (3), 314-7 (2008).

Evaluation of the Minimum Discharge from the Dam on Menta Stream (Reggio Calabria, Italy) — Giuseppe Barbaro, Paolo S. Calabrò, and Demetrio Moschella; 134 (4), 357-65 (2008).

Decay

Using Bayesian Statistics to Estimate Chlorine Wall Decay Coefficients for Water Supply System — Jinhui Jeanne Huang and Edward Arthur McBean; 134 (2), 129-37 (2008).

Decision making

Extended OWA Operator for Group Decision Making on Water Resources Projects — M. Zarghami, R. Ardakanian, A. Memariani, and F. Szidarovszky; 134 (3), 266-75 (2008).

Standard Interactive Genetic Algorithm—Comprehensive Optimization Framework for Groundwater Monitoring Design — Meghna Babbar-Sebens and Barbara Minsker; 134 (6), 538-47 (2008).

Decommissioning

Adding Radar Rainfall and Calibration to the TR-20 Watershed Model to Improve Dam Removal Flood Analysis — T. Endreny and M. Higgins; 134 (3), 314-7 (2008).

Design

Optimal Design of Water Networks Using a Modified Genetic Algorithm with Reduction in Search Space — Mahendra S. Kadu, Rajesh Gupta, and Pramod R. Bhave; 134 (2), 147-60 (2008).

Sizing Municipal Storage Tanks Based on Reliability Criteria — Jakobus E. van Zyl, Olivier Piller, and Yves le Gat; 134 (6), 548-55 (2008).

Drinking water

Importance of Exposure Model in Estimating Impacts When a Water Distribution System Is Contaminated — Michael J. Davis and Robert Janke; 134 (5), 449-56 (2008).

Economic factors

Hydrologic and Economic Implications of Climate Change for Typical River Basins of the Agricultural Midwestern United States — Hua Xie, J. Wayland Eheart, and Hyunhee An; 134 (3), 205-13 (2008).

How to Include Economic Analysis in TMDL Allocation — Arjumand Z. Zaidi, Sharon M. deMonsabert, and Raed El-Farhan; 134 (3), 214-23 (2008).

Empirical equations

Groundwater Management Using Model Reduction via Empirical Orthogonal Functions — James McPhee and William W.-G. Yeh; 134 (2), 161-70 (2008).

Energy consumption

Ant Colony Optimization for Optimal Control of Pumps in Water Distribution Networks — Manuel López-Ibáñez, T. Devi Prasad, and Ben Paechter; 134 (4), 337-46 (2008).

Environmental issues

Evaluation of the Minimum Discharge from the Dam on Menta Stream (Reggio Calabria, Italy) — Giuseppe Barbaro, Paolo S. Calabrò, and Demetrio Moschella; 134 (4), 357-65 (2008).

Estimation

Estimating the Impacts and Uncertainty of Climate Change on a Municipal Water Supply System — Matthew W. Wiley and Richard N. Palmer; 134 (3), 239-46 (2008).

Experimentation

Mixing at Cross Junctions in Water Distribution Systems. II: Experimental Study — R. G. Austin, B. van Bloemen Waanders, S. McKenna, and C. Y. Choi; 134 (3), 295-302 (2008).

Flood plains

Adding Radar Rainfall and Calibration to the TR-20 Watershed Model to Improve Dam Removal Flood Analysis — T. Endreny and M. Higgins; 134 (3), 314-7 (2008).

Flood routing

Adding Radar Rainfall and Calibration to the TR-20 Watershed Model to Improve Dam Removal Flood Analysis — T. Endreny and M. Higgins; 134 (3), 314-7 (2008).

Floods

Adding Radar Rainfall and Calibration to the TR-20 Watershed Model to Improve Dam Removal Flood Analysis — T. Endreny and M. Higgins; 134 (3), 314-7 (2008).

Optimizing Retention Basin Networks — Quentin B. Travis and Larry W. Mays; 134 (5), 432-9 (2008).

Forecasting

Peak Daily Water Demand Forecast Modeling Using Artificial Neural Networks — Jan Franklin Adamowski; 134 (2), 119-28 (2008).

Frequency analysis

Adding Radar Rainfall and Calibration to the TR-20 Watershed Model to Improve Dam Removal Flood Analysis — T. Endreny and M. Higgins; 134 (3), 314-7 (2008).

Friction

Modeling the Efficiency and Power Characteristics of a Pump Group — B. Ulanicki, J. Kahler, and B. Coulbeck; 134 (1), 88-93 (2008).

Geographic information systems

Spatial Knowledge-Based Decision Analysis System for Pond Site Assessment — Cat Shrier, Darrell Fontane, and Luis Garcia; 134 (1), 14-23 (2008).

Sensor Placement and Optimization Criteria Dependencies in a Water Distribution System — Shannon L. Isovitsch and Jeanne M. VanBriesen; 134 (2), 186-96 (2008).

Greece

Urban Water Management in Ancient Greece:

Legacies and Lessons — D. Koutsoyiannis, N. Zarkadoulas, A. N. Angelakis, and G. Tchobanoglous; 134 (1), 45-54 (2008).

Groundwater flow

Groundwater Management Using Model Reduction via Empirical Orthogonal Functions — James McPhee and William W.-G. Yeh; 134 (2), 161-70 (2008).

Solving Unconfined Groundwater Flow Management Problems with Successive Linear Programming — David P. Ahlfeld and Gemma Baro-Montes; 134 (5), 404-12 (2008).

Groundwater management

Genetic Algorithm for Constrained Optimization Models and Its Application in Groundwater Resources Management — Jiabao Guan, Elcin Kentel, and Mustafa M. Aral; 134 (1), 64-72 (2008).

Groundwater Management Using Model Reduction via Empirical Orthogonal Functions — James McPhee and William W.-G. Yeh; 134 (2), 161-70 (2008).

Reliability and Remediation Cost of Optimal Remediation Design Considering Uncertainty in Aquifer Parameters — Nak-Youl Ko and Kang-Kun Lee; 134 (5), 413-21 (2008).

Practical Remedial Design Optimization for Large Complex Plumes — Richard C. Peralta, Ineke M. Kalwij, and Shengjun Wu; 134 (5), 422-31 (2008).

Standard Interactive Genetic Algorithm—Comprehensive Optimization Framework for Groundwater Monitoring Design — Meghna Babbar-Sebens and Barbara Minsker; 134 (6), 538-47 (2008).

Groundwater pollution

Reliability and Remediation Cost of Optimal Remediation Design Considering Uncertainty in Aquifer Parameters — Nak-Youl Ko and Kang-Kun Lee; 134 (5), 413-21 (2008).

Practical Remedial Design Optimization for Large Complex Plumes — Richard C. Peralta, Ineke M. Kalwij, and Shengjun Wu; 134 (5), 422-31 (2008).

Historic sites

Urban Water Management in Ancient Greece: Legacies and Lessons — D. Koutsoyiannis, N. Zarkadoulas, A. N. Angelakis, and G. Tchobanoglous; 134 (1), 45-54 (2008).

Hybrid methods

Efficient Multiobjective Storm Sewer Design Using Cellular Automata and Genetic Algorithm Hybrid — Y. F. Guo, G. A. Walters, S. T. Khu, and E. C. Keedwell; 134 (6), 511-5 (2008).

Hydraulic models

Modeling the Efficiency and Power Characteristics of a Pump Group — B. Ulanicki, J. Kahler, and B. Coulbeck; 134 (1), 88-93 (2008).

Water Quality Model Calibration under Unknown Demands — P. M. R. Jonkergouw, S.-T. Khu, Z. S. Kapelan, and D. A. Savić; 134 (4), 326-36 (2008).

Hydraulic structures

Urban Water Management in Ancient Greece: Legacies and Lessons — D. Koutsoyiannis, N. Zarkadoulas, A. N. Angelakis, and G. Tchobanoglous; 134 (1), 45-54 (2008).

Hydraulics

Spatial and Temporal Scaling Properties of Water Demand — Roberto Magini, Isabella Pallavicini, and Roberto Guercio; 134 (3), 276-84 (2008).

Hydro powerplants

Reliability-Based Simulation-Optimization Model for Multireservoir Hydropower Systems Operations: Khersan Experience — Raheleh Afzali, Seyed Jamshid Mousavi, and Abbas Ghaheri; 134 (1), 24-33 (2008).

Hydroelectric power generation

Improved Self-Adaptive Chaotic Genetic Algorithm for Hydrogeneration Scheduling — Xiaohui Yuan, Yongchuan Zhang, and Yanbin Yuan; 134 (4), 319-25 (2008).

Hydrology

Evaluation of the Minimum Discharge from the Dam on Menta Stream (Reggio Calabria, Italy) — Giuseppe Barbaro, Paolo S. Calabrò, and Demetrio Moschella; 134 (4), 357-65 (2008).

Instream flow

Evaluation of the Minimum Discharge from the Dam on Menta Stream (Reggio Calabria, Italy) — Giuseppe Barbaro, Paolo S. Calabrò, and Demetrio Moschella; 134 (4), 357-65 (2008).

Interactive systems

Standard Interactive Genetic Algorithm—Comprehensive Optimization Framework for Groundwater Monitoring Design — Meghna Babbar-Sebens and Barbara Minsker; 134 (6), 538-47 (2008).

International waters

Game Theoretical Approach to Conflict Resolution in Transboundary Water Resources Management — Eleni Eleftheriadou and Yannis Mylopoulos; 134 (5), 466-73 (2008).

Iran

Reliability-Based Simulation-Optimization Model for Multireservoir Hydropower Systems Operations: Khersan Experience — Raheleh Afzali, Seyed Jamshid Mousavi, and Abbas Ghaheri; 134 (1), 24-33 (2008).

Extended OWA Operator for Group Decision Making on Water Resources Projects — M. Zarghami, R. Ardakanian, A. Memariani, and F. Szidarovszky; 134 (3), 266-75 (2008).

Irrigation

Hydrologic and Economic Implications of Climate Change for Typical River Basins of the Agricultural Midwestern United States — Hua Xie, J. Wayland Eheart, and Hyunhee An; 134 (3), 205-13 (2008).

Optimal Design of Gravity-Fed Looped Water Distribution Networks Considering the Resilience Index — J. Reca, J. Martínez, R. Baños, and C. Gil; 134 (3), 234-8 (2008).

Italy

Evaluation of the Minimum Discharge from the Dam on Menta Stream (Reggio Calabria, Italy) — Giuseppe Barbaro, Paolo S. Calabrò, and Demetrio Moschella; 134 (4), 357-65 (2008).

Jamaica

Optimal Siting of Regional Fecal Sludge Treatment Facilities: St. Elizabeth, Jamaica — Ana Martha Fernandes, Paul Kirshen, and Richard M. Vogel; 134 (1), 55-63 (2008).

Japan

Integrating Long- and Short-Term Reservoir Operation Models via Stochastic and Deterministic Optimization: Case Study in Japan — Alcigeimes Batista Celeste, Koichi Suzuki, and Akihiro Kadota; 134 (5), 440-8 (2008).

Knowledge-based systems

Spatial Knowledge-Based Decision Analysis System for Pond Site Assessment — Cat Shrier, Darrell Fontane, and Luis Garcia; 134 (1), 14-23 (2008).

Lakes

Inexact Chance-Constrained Linear Programming Model for Optimal Water Pollution Management at the Watershed Scale — Yong Liu, Huaicheng Guo, Feng Zhou, Xiaosheng Qin, Kai Huang, and Yajuan Yu; 134 (4), 347-56 (2008).

Low flow

Hydrologic and Economic Implications of Climate Change for Typical River Basins of the Agricultural Midwestern United States — Hua Xie, J. Wayland Eheart, and Hyunhee An; 134 (3), 205-13 (2008).

Mathematical models

Hydraulic Analysis of Peak Demand in Looped Water Distribution Networks — Javier Martínez-Solano, Pedro L. Iglesias-Rey, Rafael Pérez-García, and P. Amparo López-Jiménez; 134 (6), 504-10 (2008).

Measurement

Uncertainty Analysis for Watershed Modeling Using Generalized Likelihood Uncertainty Estimation with Multiple Calibration Measures — Yanbing Jia and Teresa B. Culver; 134 (2), 97-106 (2008).

Mixing

Mixing at Cross Junctions in Water Distribution Systems. I: Numerical Study — P. Romero-Gomez, C. K. Ho, and C. Y. Choi; 134 (3), 285-94 (2008).

Model analysis

Using Bayesian Statistics to Estimate Chlorine Wall Decay Coefficients for Water Supply System — Jinhui Jeanne Huang and Edward Arthur McBean; 134 (2), 129-37 (2008).

Monitoring

Design Optimization of River Sampling Network Using Genetic Algorithms — Huei-Tau Ouyang, Hsin Yu, Chin-Huang Lu, and Yuan-Hong Luo; 134 (1), 83-7 (2008).

State Estimation in Water Distribution Networks Using Graph-Theoretic Reduction Strategy — S. Mohan Kumar, Shankar Narasimhan, and S. Murty Bhallamudi; 134 (5), 395-403 (2008).

Standard Interactive Genetic Algorithm—Comprehensive Optimization Framework for Groundwater Monitoring Design — Meghna Babbar-Sebens and Barbara Minsker; 134 (6), 538-47 (2008).

Monte Carlo method

Using Bayesian Statistics to Estimate Chlorine Wall Decay Coefficients for Water Supply System — Jinhui Jeanne Huang and Edward Arthur McBean; 134 (2), 129-37 (2008).

Multiple objective analysis

Planning and Operation of Large-Scale Water Distribution Systems with Preemptive Priorities — Mario T. L. Barros, Renato C. Zambon, Paulo S.

F. Barbosa, and William W.-G. Yeh; 134 (3), 247-56 (2008).

Multiple purpose projects

Optimal Design of Gravity-Fed Looped Water Distribution Networks Considering the Resilience Index — J. Reca, J. Martínez, R. Baños, and C. Gil; 134 (3), 234-8 (2008).

Extended OWA Operator for Group Decision Making on Water Resources Projects — M. Zarghami, R. Ardakanian, A. Memariani, and F. Szidarovszky; 134 (3), 266-75 (2008).

Municipal engineering

Sizing Municipal Storage Tanks Based on Reliability Criteria — Jakobus E. van Zyl, Olivier Piller, and Yves le Gat; 134 (6), 548-55 (2008).

Municipal water

Peak Daily Water Demand Forecast Modeling Using Artificial Neural Networks — Jan Franklin Adamowski; 134 (2), 119-28 (2008).

Estimating the Impacts and Uncertainty of Climate Change on a Municipal Water Supply System — Matthew W. Wiley and Richard N. Palmer; 134 (3), 239-46 (2008).

Importance of Exposure Model in Estimating Impacts When a Water Distribution System Is Contaminated — Michael J. Davis and Robert Janke; 134 (5), 449-56 (2008).

Network analysis

Identifying Sets of Key Nodes for Placing Sensors in Dynamic Water Distribution Networks — Jianhua Xu, Paul S. Fischbeck, Mitchell J. Small, Jeanne M. VanBriesen, and Elizabeth Casman; 134 (4), 378-85 (2008).

Hydraulic Analysis of Peak Demand in Looped Water Distribution Networks — Javier Martínez-Solano, Pedro L. Iglesias-Rey, Rafael Pérez-García, and P. Amparo López-Jiménez; 134 (6), 504-10 (2008).

Extended Period Simulation Analysis Considering Valve Shutdowns — Orazio Giustolisi, Zoran Kapelan, and Dragan Savic; 134 (6), 527-37 (2008).

Network design

Multiobjective Contaminant Sensor Network Design for Water Distribution Systems — Ami Preis and Avi Ostfeld; 134 (4), 366-77 (2008).

Networks

Ant Colony Optimization for Least-Cost Design and Operation of Pumping Water Distribution Systems — Avi Ostfeld and Ariel Tubaltzev; 134 (2), 107-18 (2008).

Neural networks

Urban Water Demand Forecasting with a Dynamic Artificial Neural Network Model — M. Ghiassi, David K. Zimbra, and H. Saidane; 134 (2), 138-46 (2008).

Niagara River

Incorporating Reliability into the Definition of the Margin of Safety in Total Maximum Daily Load Calculations — Samuela Franceschini and Christina W. Tsai; 134 (1), 34-44 (2008).

Nitrogen

Evaluation of a Modeling Approach to Assess Nitrogen Assimilative Capacity due to River Restoration — Karin Peternel-Staggs, Laurel Saito, and Christian H. Fritsen; 134 (5), 474-86 (2008).

Nonpoint pollution

How to Include Economic Analysis in TMDL Allocation — Arjumand Z. Zaidi, Sharon M. deMonsabert, and Raed El-Farhan; 134 (3), 214-23 (2008).

Numerical analysis

Genetic Algorithm for Constrained Optimization Models and Its Application in Groundwater Resources Management — Jiabao Guan, Elcin Kentel, and Mustafa M. Aral; 134 (1), 64-72 (2008).

Numerical models

Incorporating Reliability into the Definition of the Margin of Safety in Total Maximum Daily Load Calculations — Samuela Franceschini and Christina W. Tsai; 134 (1), 34-44 (2008).

Mixing at Cross Junctions in Water Distribution Systems. I: Numerical Study — P. Romero-Gomez, C. K. Ho, and C. Y. Choi; 134 (3), 285-94 (2008).

Open channels

Chance Constrained Optimal Design of Trapezoidal Channels — Amlan Das; 134 (3), 310-3 (2008).

Operation

Optimal Real-Time Operation of Urban Water Distribution Systems Using Reduced Models — Uri Shamir and Elad Salomons; 134 (2), 181-5 (2008).

Optimization

Optimization of Hedging Rules for Reservoir Operations — Ming-Yen Tu, Nien-Sheng Hsu, Frank T.-C. Tsai, and William W.-G. Yeh; 134 (1), 3-13 (2008).

Reliability-Based Simulation-Optimization Model for Multireservoir Hydropower Systems Operations: Khersan Experience — Raheleh Afzali, Seyed Jamshid Mousavi, and Abbas Ghaheri; 134 (1), 24-33 (2008).

Optimal Siting of Regional Fecal Sludge Treatment Facilities: St. Elizabeth, Jamaica — Ana Martha Fernandes, Paul Kirshen, and Richard M. Vogel; 134 (1), 55-63 (2008).

Design Optimization of River Sampling Network Using Genetic Algorithms — Huei-Tau Ouyang, Hsin Yu, Chin-Huang Lu, and Yuan-Hong Luo; 134 (1), 83-7 (2008).

Optimal Design of Water Networks Using a Modified Genetic Algorithm with Reduction in Search Space — Mahendra S. Kadu, Rajesh Gupta, and Pramod R. Bhave; 134 (2), 147-60 (2008).

Optimal Real-Time Operation of Urban Water Distribution Systems Using Reduced Models — Uri Shamir and Elad Salomons; 134 (2), 181-5 (2008).

Sensor Placement and Optimization Criteria Dependencies in a Water Distribution System — Shannon L. Isovitsch and Jeanne M. VanBriesen; 134 (2), 186-96 (2008).

How to Include Economic Analysis in TMDL Allocation — Arjumand Z. Zaidi, Sharon M. deMonsabert, and Raed El-Farhan; 134 (3), 214-23 (2008).

Planning and Operation of Large-Scale Water Distribution Systems with Preemptive Priorities — Mario T. L. Barros, Renato C. Zambon, Paulo S. F. Barbosa, and William W.-G. Yeh; 134 (3), 247-56 (2008).

Use of Multiobjective Particle Swarm Optimization in Water Resources Management — Alexandre M. Baltar and Darrell G. Fontane; 134 (3), 257-65 (2008).

Water Distribution System Aggregation for Water Quality Analysis — Lina Perelman and Avi Ostfeld; 134 (3), 303-9 (2008).

Chance Constrained Optimal Design of Trapezoidal Channels — Amlan Das; 134 (3), 310-3 (2008).

Improved Self-Adaptive Chaotic Genetic Algorithm for Hydrogeneration Scheduling — Xiaohui Yuan, Yongchuan Zhang, and Yanbin Yuan; 134 (4), 319-25 (2008).

Ant Colony Optimization for Optimal Control of Pumps in Water Distribution Networks — Manuel López-Ibáñez, T. Devi Prasad, and Ben Paechter; 134 (4), 337-46 (2008).

Inexact Chance-Constrained Linear Programming Model for Optimal Water Pollution Management at the Watershed Scale — Yong Liu, Huaicheng Guo, Feng Zhou, Xiaosheng Qin, Kai Huang, and Yajuan Yu; 134 (4), 347-56 (2008).

Consequence Management Utilizing Optimization — T. M. Baranowski and E. J. LeBoeuf; 134 (4), 386-94 (2008).

Reliability and Remediation Cost of Optimal Remediation Design Considering Uncertainty in Aquifer Parameters — Nak-Youl Ko and Kang-Kun Lee; 134 (5), 413-21 (2008).

Practical Remedial Design Optimization for Large Complex Plumes — Richard C. Peralta, Ineke M. Kalwij, and Shengjun Wu; 134 (5), 422-31 (2008).

Optimizing Retention Basin Networks — Quentin B. Travis and Larry W. Mays; 134 (5), 432-9 (2008).

Efficient Multiobjective Storm Sewer Design Using Cellular Automata and Genetic Algorithm Hybrid — Y. F. Guo, G. A. Walters, S. T. Khu, and E. C. Keedwell; 134 (6), 511-5 (2008).

Efficient Sensor Placement Optimization for Securing Large Water Distribution Networks — Andreas Krause, Jure Leskovec, Carlos Guestrin, Jeanne VanBriesen, and Christos Faloutsos; 134 (6), 516-26 (2008).

Standard Interactive Genetic Algorithm—Comprehensive Optimization Framework for Groundwater Monitoring Design — Meghna Babbar-Sebens and Barbara Minsker; 134 (6), 538-47 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Optimization models
Ant Colony Optimization for Least-Cost Design and Operation of Pumping Water Distribution Systems — Avi Ostfeld and Ariel Tubaltzev; 134 (2), 107-18 (2008).

Integrating Long- and Short-Term Reservoir Operation Models via Stochastic and Deterministic Optimization: Case Study in Japan — Alcigeimes Batista Celeste, Koichi Suzuki, and Akihiro Kadota; 134 (5), 440-8 (2008).

Parallel processing
Improving Seawater Barrier Operation with Simulation Optimization in Southern California — Benjamin S. Bray and William W.-G. Yeh; 134 (2), 171-80 (2008).

Parameters
Reliability and Remediation Cost of Optimal Remediation Design Considering Uncertainty in Aquifer Parameters — Nak-Youl Ko and Kang-Kun Lee; 134 (5), 413-21 (2008).

Particles
Use of Multiobjective Particle Swarm Optimization in Water Resources Management — Alexandre M. Baltar and Darrell G. Fontane; 134 (3), 257-65 (2008).

Pipe flow
Modeling the Efficiency and Power Characteristics of a Pump Group — B. Ulanicki, J. Kahler, and B. Coulbeck; 134 (1), 88-93 (2008).

Pipe networks
Optimal Design of Water Networks Using a Modified Genetic Algorithm with Reduction in Search Space — Mahendra S. Kadu, Rajesh Gupta, and Pramod R. Bhave; 134 (2), 147-60 (2008).

Optimal Design of Gravity-Fed Looped Water Distribution Networks Considering the Resilience Index — J. Reca, J. Martínez, R. Baños, and C. Gil; 134 (3), 234-8 (2008).

State Estimation in Water Distribution Networks Using Graph-Theoretic Reduction Strategy — S. Mohan Kumar, Shankar Narasimhan, and S. Murty Bhallamudi; 134 (5), 395-403 (2008).

Plumes
Practical Remedial Design Optimization for Large Complex Plumes — Richard C. Peralta, Ineke M. Kalwij, and Shengjun Wu; 134 (5), 422-31 (2008).

Ponds
Spatial Knowledge-Based Decision Analysis System for Pond Site Assessment — Cat Shrier, Darrell Fontane, and Luis Garcia; 134 (1), 14-23 (2008).

Potable water
Mixing at Cross Junctions in Water Distribution Systems. I: Numerical Study — P. Romero-Gomez, C. K. Ho, and C. Y. Choi; 134 (3), 285-94 (2008).

Mixing at Cross Junctions in Water Distribution Systems. II: Experimental Study — R. G. Austin, B. van Bloemen Waanders, S. McKenna, and C. Y. Choi; 134 (3), 295-302 (2008).

Heuristic Approach for Operational Response to Drinking Water Contamination — Annie Poulin, Alain Mailhot, Patrice Grondin, Louis Delorme, Nathalie Periche, and Jean-Pierre Villeneuve; 134 (5), 457-65 (2008).

Privatization
Limits to Water Privatization — Stephen E. Draper; 134 (6), 493-503 (2008).

Probability
Uncertainty Analysis for Watershed Modeling Using Generalized Likelihood Uncertainty Estimation with Multiple Calibration Measures — Yanbing Jia and Teresa B. Culver; 134 (2), 97-106 (2008).

Public health
Combining Real-Time Bacteria Models and Uncertainty Analysis for Establishing Health Advisories for Recreational Waters — Matthew G. Heberger, John L. Durant, Kimberly A. Oriel, Paul H. Kirshen, and Lee Minardi; 134 (1), 73-82 (2008).

Importance of Exposure Model in Estimating Impacts When a Water Distribution System Is Contaminated — Michael J. Davis and Robert Janke; 134 (5), 449-56 (2008).

Pumping stations
Ant Colony Optimization for Least-Cost Design and Operation of Pumping Water Distribution Systems — Avi Ostfeld and Ariel Tubaltzev; 134 (2), 107-18 (2008).

Pumps
Modeling the Efficiency and Power Characteristics of a Pump Group — B. Ulanicki, J. Kahler, and B. Coulbeck; 134 (1), 88-93 (2008).

Ant Colony Optimization for Optimal Control of Pumps in Water Distribution Networks — Manuel López-Ibáñez, T. Devi Prasad, and Ben Paechter; 134 (4), 337-46 (2008).

Practical Remedial Design Optimization for Large Complex Plumes — Richard C. Peralta, Ineke M. Kalwij, and Shengjun Wu; 134 (5), 422-31 (2008).

Recharge basins
Spatial Knowledge-Based Decision Analysis System for Pond Site Assessment — Cat Shrier, Darrell Fontane, and Luis Garcia; 134 (1), 14-23 (2008).

Recreation
Combining Real-Time Bacteria Models and Uncertainty Analysis for Establishing Health Advisories for Recreational Waters — Matthew G. Heberger, John L. Durant, Kimberly A. Oriel, Paul H. Kirshen, and Lee Minardi; 134 (1), 73-82 (2008).

Regression analysis
Peak Daily Water Demand Forecast Modeling Using Artificial Neural Networks — Jan Franklin Adamowski; 134 (2), 119-28 (2008).

Remedial action
Reliability and Remediation Cost of Optimal Remediation Design Considering Uncertainty in Aquifer Parameters — Nak-Youl Ko and Kang-Kun Lee; 134 (5), 413-21 (2008).

Practical Remedial Design Optimization for Large Complex Plumes — Richard C. Peralta, Ineke M. Kalwij, and Shengjun Wu; 134 (5), 422-31 (2008).

Reservoir operation
Optimization of Hedging Rules for Reservoir Operations — Ming-Yen Tu, Nien-Sheng Hsu, Frank T.-C. Tsai, and William W.-G. Yeh; 134 (1), 3-13 (2008).

Planning and Operation of Large-Scale Water Distribution Systems with Preemptive Priorities — Mario T. L. Barros, Renato C. Zambon, Paulo S. F. Barbosa, and William W.-G. Yeh; 134 (3), 247-56 (2008).

Reservoirs
Reliability-Based Simulation-Optimization Model for Multireservoir Hydropower Systems Operations: Khersan Experience — Raheleh Afzali, Seyed Jamshid Mousavi, and Abbas Ghaheri; 134 (1), 24-33 (2008).

Use of Multiobjective Particle Swarm Optimization in Water Resources Management — Alexandre M. Baltar and Darrell G. Fontane; 134 (3), 257-65 (2008).

Integrating Long- and Short-Term Reservoir Operation Models via Stochastic and Deterministic Optimization: Case Study in Japan — Alcigeimes Batista Celeste, Koichi Suzuki, and Akihiro Kadota; 134 (5), 440-8 (2008).

Restoration
Evaluation of a Modeling Approach to Assess Nitrogen Assimilative Capacity due to River Restoration — Karin Peternel-Staggs, Laurel Saito, and Christian H. Fritsen; 134 (5), 474-86 (2008).

Retention basins
Optimizing Retention Basin Networks — Quentin B. Travis and Larry W. Mays; 134 (5), 432-9 (2008).

Risk management
Risk and Resilience to Enhance Sustainability with Application to Urban Water Systems — Jane M. Blackmore and Roel A. J. Plant; 134 (3), 224-33 (2008).

Heuristic Approach for Operational Response to Drinking Water Contamination — Annie Poulin, Alain Mailhot, Patrice Grondin, Louis Delorme, Nathalie Periche, and Jean-Pierre Villeneuve; 134 (5), 457-65 (2008).

Extended Period Simulation Analysis Considering Valve Shutdowns — Orazio Giustolisi, Zoran Kapelan, and Dragan Savic; 134 (6), 527-37 (2008).

River basins
Hydrologic and Economic Implications of Climate Change for Typical River Basins of the Agricultural Midwestern United States — Hua Xie, J. Wayland Eheart, and Hyunhee An; 134 (3), 205-13 (2008).

Game Theoretical Approach to Conflict Resolution in Transboundary Water Resources Management — Eleni Eleftheriadou and Yannis Mylopoulos; 134 (5), 466-73 (2008).

River systems
Design Optimization of River Sampling Network Using Genetic Algorithms — Huei-Tau Ouyang, Hsin Yu, Chin-Huang Lu, and Yuan-Hong Luo; 134 (1), 83-7 (2008).

Rivers
Evaluation of a Modeling Approach to Assess Nitrogen Assimilative Capacity due to River Restoration — Karin Peternel-Staggs, Laurel Saito, and Christian H. Fritsen; 134 (5), 474-86 (2008).

Roughness
Chance Constrained Optimal Design of Trapezoidal Channels — Amlan Das; 134 (3), 310-3 (2008).

Routing
Reliability-Based Simulation-Optimization Model for Multireservoir Hydropower Systems Operations: Khersan Experience — Raheleh Afzali, Seyed Jamshid Mousavi, and Abbas Ghaheri; 134 (1), 24-33 (2008).

Optimizing Retention Basin Networks — Quentin B. Travis and Larry W. Mays; 134 (5), 432-9 (2008).

Salt water intrusion
Genetic Algorithm for Constrained Optimization Models and Its Application in Groundwater Resources Management — Jiabao Guan, Elcin Kentel, and Mustafa M. Aral; 134 (1), 64-72 (2008).

Improving Seawater Barrier Operation with Simulation Optimization in Southern California — Benjamin S. Bray and William W.-G. Yeh; 134 (2), 171-80 (2008).

Sampling
Design Optimization of River Sampling Network Using Genetic Algorithms — Huei-Tau Ouyang, Hsin Yu, Chin-Huang Lu, and Yuan-Hong Luo; 134 (1), 83-7 (2008).

Multiobjective Contaminant Sensor Network Design for Water Distribution Systems — Ami Preis and Avi Ostfeld; 134 (4), 366-77 (2008).

Scale effect
Spatial and Temporal Scaling Properties of Water Demand — Roberto Magini, Isabella Pallavicini, and Roberto Guercio; 134 (3), 276-84 (2008).

Scheduling
Improved Self-Adaptive Chaotic Genetic Algorithm for Hydrogeneration Scheduling — Xiaohui Yuan, Yongchuan Zhang, and Yanbin Yuan; 134 (4), 319-25 (2008).

Security
Identifying Sets of Key Nodes for Placing Sensors in Dynamic Water Distribution Networks — Jianhua Xu, Paul S. Fischbeck, Mitchell J. Small, Jeanne M. VanBriesen, and Elizabeth Casman; 134 (4), 378-85 (2008).

Consequence Management Utilizing Optimization — T. M. Baranowski and E. J. LeBoeuf; 134 (4), 386-94 (2008).

Heuristic Approach for Operational Response to Drinking Water Contamination — Annie Poulin, Alain Mailhot, Patrice Grondin, Louis Delorme, Nathalie Periche, and Jean-Pierre Villeneuve; 134 (5), 457-65 (2008).

Sensitivity analysis
Ant Colony Optimization for Least-Cost Design and Operation of Pumping Water Distribution Systems — Avi Ostfeld and Ariel Tubaltzev; 134 (2), 107-18 (2008).

Sensors
Sensor Placement and Optimization Criteria Dependencies in a Water Distribution System — Shannon L. Isovitsch and Jeanne M. VanBriesen; 134 (2), 186-96 (2008).

Multiobjective Contaminant Sensor Network Design for Water Distribution Systems — Ami Preis and Avi Ostfeld; 134 (4), 366-77 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Sewer design
Efficient Multiobjective Storm Sewer Design Using Cellular Automata and Genetic Algorithm Hybrid — Y. F. Guo, G. A. Walters, S. T. Khu, and E. C. Keedwell; 134 (6), 511-5 (2008).

Simulation
Reliability-Based Simulation-Optimization Model for Multireservoir Hydropower Systems Operations: Khersan Experience — Raheleh Afzali, Seyed Jamshid Mousavi, and Abbas Ghaheri; 134 (1), 24-33 (2008).

Groundwater Management Using Model Reduction via Empirical Orthogonal Functions — James McPhee and William W.-G. Yeh; 134 (2), 161-70 (2008).

Importance of Exposure Model in Estimating Impacts When a Water Distribution System Is Contaminated — Michael J. Davis and Robert Janke; 134 (5), 449-56 (2008).

Extended Period Simulation Analysis Considering Valve Shutdowns — Orazio Giustolisi, Zoran Kapelan, and Dragan Savic; 134 (6), 527-37 (2008).

Simulation models
Uncertainty Analysis for Watershed Modeling Using Generalized Likelihood Uncertainty Estimation with Multiple Calibration Measures — Yanbing Jia and Teresa B. Culver; 134 (2), 97-106 (2008).

Improving Seawater Barrier Operation with Simulation Optimization in Southern California — Benjamin S. Bray and William W.-G. Yeh; 134 (2), 171-80 (2008).

Evaluation of a Modeling Approach to Assess Nitrogen Assimilative Capacity due to River Restoration — Karin Peternel-Staggs, Laurel Saito, and Christian H. Fritsen; 134 (5), 474-86 (2008).

Sludge
Optimal Siting of Regional Fecal Sludge Treatment Facilities: St. Elizabeth, Jamaica — Ana Martha Fernandes, Paul Kirshen, and Richard M. Vogel; 134 (1), 55-63 (2008).

Statistics
Using Bayesian Statistics to Estimate Chlorine Wall Decay Coefficients for Water Supply System — Jinhui Jeanne Huang and Edward Arthur McBean; 134 (2), 129-37 (2008).

Spatial and Temporal Scaling Properties of Water Demand — Roberto Magini, Isabella Pallavicini, and Roberto Guercio; 134 (3), 276-84 (2008).

Hydraulic Analysis of Peak Demand in Looped Water Distribution Networks — Javier Martínez-Solano, Pedro L. Iglesias-Rey, Rafael Pérez-García, and P. Amparo López-Jiménez; 134 (6), 504-10 (2008).

Stochastic models
Integrating Long- and Short-Term Reservoir Operation Models via Stochastic and Deterministic Optimization: Case Study in Japan — Alcigeimes Batista Celeste, Koichi Suzuki, and Akihiro Kadota; 134 (5), 440-8 (2008).

Sizing Municipal Storage Tanks Based on Reliability Criteria — Jakobus E. van Zyl, Olivier Piller, and Yves le Gat; 134 (6), 548-55 (2008).

Stochastic processes
Spatial and Temporal Scaling Properties of Water Demand — Roberto Magini, Isabella Pallavicini, and Roberto Guercio; 134 (3), 276-84 (2008).

Reliability and Remediation Cost of Optimal Remediation Design Considering Uncertainty in Aquifer Parameters — Nak-Youl Ko and Kang-Kun Lee; 134 (5), 413-21 (2008).

Storage tanks
Sizing Municipal Storage Tanks Based on Reliability Criteria — Jakobus E. van Zyl, Olivier Piller, and Yves le Gat; 134 (6), 548-55 (2008).

Storm sewers
Efficient Multiobjective Storm Sewer Design Using Cellular Automata and Genetic Algorithm Hybrid — Y. F. Guo, G. A. Walters, S. T. Khu, and E. C. Keedwell; 134 (6), 511-5 (2008).

Stormwater management
Optimizing Retention Basin Networks — Quentin B. Travis and Larry W. Mays; 134 (5), 432-9 (2008).

Streamflow
Reliability-Based Simulation-Optimization Model for Multireservoir Hydropower Systems Operations: Khersan Experience — Raheleh Afzali, Seyed Jamshid Mousavi, and Abbas Ghaheri; 134 (1), 24-33 (2008).

Sustainable development
Risk and Resilience to Enhance Sustainability with Application to Urban Water Systems — Jane M. Blackmore and Roel A. J. Plant; 134 (3), 224-33 (2008).

System analysis
Optimal Siting of Regional Fecal Sludge Treatment Facilities: St. Elizabeth, Jamaica — Ana Martha Fernandes, Paul Kirshen, and Richard M. Vogel; 134 (1), 55-63 (2008).

System reliability
Extended Period Simulation Analysis Considering Valve Shutdowns — Orazio Giustolisi, Zoran Kapelan, and Dragan Savic; 134 (6), 527-37 (2008).

Sizing Municipal Storage Tanks Based on Reliability Criteria — Jakobus E. van Zyl, Olivier Piller, and Yves le Gat; 134 (6), 548-55 (2008).

Terrorism
Importance of Exposure Model in Estimating Impacts When a Water Distribution System Is Contaminated — Michael J. Davis and Robert Janke; 134 (5), 449-56 (2008).

Time series analysis
Peak Daily Water Demand Forecast Modeling Using Artificial Neural Networks — Jan Franklin Adamowski; 134 (2), 119-28 (2008).

Urban Water Demand Forecasting with a Dynamic Artificial Neural Network Model — M. Ghiassi,

David K. Zimbra, and H. Saidane; 134 (2), 138-46 (2008).

Transport phenomena

Mixing at Cross Junctions in Water Distribution Systems. II: Experimental Study — R. G. Austin, B. van Bloemen Waanders, S. McKenna, and C. Y. Choi; 134 (3), 295-302 (2008).

Uncertainty principles

Incorporating Reliability into the Definition of the Margin of Safety in Total Maximum Daily Load Calculations — Samuela Franceschini and Christina W. Tsai; 134 (1), 34-44 (2008).

Combining Real-Time Bacteria Models and Uncertainty Analysis for Establishing Health Advisories for Recreational Waters — Matthew G. Heberger, John L. Durant, Kimberly A. Oriel, Paul H. Kirshen, and Lee Minardi; 134 (1), 73-82 (2008).

Uncertainty Analysis for Watershed Modeling Using Generalized Likelihood Uncertainty Estimation with Multiple Calibration Measures — Yanbing Jia and Teresa B. Culver; 134 (2), 97-106 (2008).

Pollution Source Identification of Accidental Contamination in Water Distribution Networks — Cristiana Di Cristo and Angelo Leopardi; 134 (2), 197-202 (2008).

Estimating the Impacts and Uncertainty of Climate Change on a Municipal Water Supply System — Matthew W. Wiley and Richard N. Palmer; 134 (3), 239-46 (2008).

Inexact Chance-Constrained Linear Programming Model for Optimal Water Pollution Management at the Watershed Scale — Yong Liu, Huaicheng Guo, Feng Zhou, Xiaosheng Qin, Kai Huang, and Yajuan Yu; 134 (4), 347-56 (2008).

United States

Hydrologic and Economic Implications of Climate Change for Typical River Basins of the Agricultural Midwestern United States — Hua Xie, J. Wayland Eheart, and Hyunhee An; 134 (3), 205-13 (2008).

Urban areas

Urban Water Demand Forecasting with a Dynamic Artificial Neural Network Model — M. Ghiassi, David K. Zimbra, and H. Saidane; 134 (2), 138-46 (2008).

Risk and Resilience to Enhance Sustainability with Application to Urban Water Systems — Jane M. Blackmore and Roel A. J. Plant; 134 (3), 224-33 (2008).

Urban development

Urban Water Management in Ancient Greece: Legacies and Lessons — D. Koutsoyiannis, N. Zarkadoulas, A. N. Angelakis, and G. Tchobanoglous; 134 (1), 45-54 (2008).

Vegetation

Evaluation of a Modeling Approach to Assess Nitrogen Assimilative Capacity due to River Restoration — Karin Peternel-Staggs, Laurel Saito, and Christian H. Fritsen; 134 (5), 474-86 (2008).

Washington

Estimating the Impacts and Uncertainty of Climate Change on a Municipal Water Supply System — Matthew W. Wiley and Richard N. Palmer; 134 (3), 239-46 (2008).

Waste stabilization ponds

Optimal Siting of Regional Fecal Sludge Treatment Facilities: St. Elizabeth, Jamaica — Ana Martha Fernandes, Paul Kirshen, and Richard M. Vogel; 134 (1), 55-63 (2008).

Wastewater management

Optimal Siting of Regional Fecal Sludge Treatment Facilities: St. Elizabeth, Jamaica — Ana Martha Fernandes, Paul Kirshen, and Richard M. Vogel; 134 (1), 55-63 (2008).

Water allocation policy

Limits to Water Privatization — Stephen E. Draper; 134 (6), 493-503 (2008).

Water demand

Peak Daily Water Demand Forecast Modeling Using Artificial Neural Networks — Jan Franklin Adamowski; 134 (2), 119-28 (2008).

Urban Water Demand Forecasting with a Dynamic Artificial Neural Network Model — M. Ghiassi, David K. Zimbra, and H. Saidane; 134 (2), 138-46 (2008).

Pollution Source Identification of Accidental Contamination in Water Distribution Networks — Cristiana Di Cristo and Angelo Leopardi; 134 (2), 197-202 (2008).

Spatial and Temporal Scaling Properties of Water Demand — Roberto Magini, Isabella Pallavicini, and Roberto Guercio; 134 (3), 276-84 (2008).

Hydraulic Analysis of Peak Demand in Looped Water Distribution Networks — Javier Martínez-Solano, Pedro L. Iglesias-Rey, Rafael Pérez-García, and P. Amparo López-Jiménez; 134 (6), 504-10 (2008).

Water distribution

Consequence Management Utilizing Optimization — T. M. Baranowski and E. J. LeBoeuf; 134 (4), 386-94 (2008).

Water distribution systems

Optimization of Hedging Rules for Reservoir Operations — Ming-Yen Tu, Nien-Sheng Hsu, Frank T.-C. Tsai, and William W.-G. Yeh; 134 (1), 3-13 (2008).

Modeling the Efficiency and Power Characteristics of a Pump Group — B. Ulanicki, J. Kahler, and B. Coulbeck; 134 (1), 88-93 (2008).

Ant Colony Optimization for Least-Cost Design and Operation of Pumping Water Distribution Systems — Avi Ostfeld and Ariel Tubaltzev; 134 (2), 107-18 (2008).

Using Bayesian Statistics to Estimate Chlorine Wall Decay Coefficients for Water Supply System — Jinhui Jeanne Huang and Edward Arthur McBean; 134 (2), 129-37 (2008).

Optimal Design of Water Networks Using a Modified Genetic Algorithm with Reduction in Search Space — Mahendra S. Kadu, Rajesh Gupta, and Pramod R. Bhave; 134 (2), 147-60 (2008).

Optimal Real-Time Operation of Urban Water Distribution Systems Using Reduced Models — Uri Shamir and Elad Salomons; 134 (2), 181-5 (2008).

Sensor Placement and Optimization Criteria Dependencies in a Water Distribution System — Shannon L. Isovitsch and Jeanne M. VanBriesen; 134 (2), 186-96 (2008).

Pollution Source Identification of Accidental Contamination in Water Distribution Networks — Cristiana Di Cristo and Angelo Leopardi; 134 (2), 197-202 (2008).

Risk and Resilience to Enhance Sustainability with Application to Urban Water Systems — Jane M. Blackmore and Roel A. J. Plant; 134 (3), 224-33 (2008).

Optimal Design of Gravity-Fed Looped Water Distribution Networks Considering the Resilience Index — J. Reca, J. Martínez, R. Baños, and C. Gil; 134 (3), 234-8 (2008).

Planning and Operation of Large-Scale Water Distribution Systems with Preemptive Priorities — Mario T. L. Barros, Renato C. Zambon, Paulo S. F. Barbosa, and William W.-G. Yeh; 134 (3), 247-56 (2008).

Mixing at Cross Junctions in Water Distribution Systems. I: Numerical Study — P. Romero-Gomez, C. K. Ho, and C. Y. Choi; 134 (3), 285-94 (2008).

Mixing at Cross Junctions in Water Distribution Systems. II: Experimental Study — R. G. Austin, B. van Bloemen Waanders, S. McKenna, and C. Y. Choi; 134 (3), 295-302 (2008).

Water Distribution System Aggregation for Water Quality Analysis — Lina Perelman and Avi Ostfeld; 134 (3), 303-9 (2008).

Water Quality Model Calibration under Unknown Demands — P. M. R. Jonkergouw, S.-T. Khu, Z. S. Kapelan, and D. A. Savić; 134 (4), 326-36 (2008).

Ant Colony Optimization for Optimal Control of Pumps in Water Distribution Networks — Manuel López-Ibáñez, T. Devi Prasad, and Ben Paechter; 134 (4), 337-46 (2008).

Multiobjective Contaminant Sensor Network Design for Water Distribution Systems — Ami Preis and Avi Ostfeld; 134 (4), 366-77 (2008).

Identifying Sets of Key Nodes for Placing Sensors in Dynamic Water Distribution Networks — Jianhua Xu, Paul S. Fischbeck, Mitchell J. Small, Jeanne M. VanBriesen, and Elizabeth Casman; 134 (4), 378-85 (2008).

State Estimation in Water Distribution Networks Using Graph-Theoretic Reduction Strategy — S. Mohan Kumar, Shankar Narasimhan, and S. Murty Bhallamudi; 134 (5), 395-403 (2008).

Importance of Exposure Model in Estimating Impacts When a Water Distribution System Is Contaminated — Michael J. Davis and Robert Janke; 134 (5), 449-56 (2008).

Heuristic Approach for Operational Response to Drinking Water Contamination — Annie Poulin, Alain Mailhot, Patrice Grondin, Louis Delorme, Nathalie Periche, and Jean-Pierre Villeneuve; 134 (5), 457-65 (2008).

Hydraulic Analysis of Peak Demand in Looped Water Distribution Networks — Javier Martínez-Solano, Pedro L. Iglesias-Rey, Rafael Pérez-García, and P. Amparo López-Jiménez; 134 (6), 504-10 (2008).

Efficient Sensor Placement Optimization for Securing Large Water Distribution Networks — Andreas Krause, Jure Leskovec, Carlos Guestrin, Jeanne VanBriesen, and Christos Faloutsos; 134 (6), 516-26 (2008).

Extended Period Simulation Analysis Considering Valve Shutdowns — Orazio Giustolisi, Zoran Kapelan, and Dragan Savic; 134 (6), 527-37 (2008).

Sizing Municipal Storage Tanks Based on Reliability Criteria — Jakobus E. van Zyl, Olivier Piller, and Yves le Gat; 134 (6), 548-55 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Water management

Urban Water Management in Ancient Greece: Legacies and Lessons — D. Koutsoyiannis, N. Zarkadoulas, A. N. Angelakis, and G. Tchobanoglous; 134 (1), 45-54 (2008).

Risk and Resilience to Enhance Sustainability with Application to Urban Water Systems — Jane M. Blackmore and Roel A. J. Plant; 134 (3), 224-33 (2008).

Evaluation of the Minimum Discharge from the Dam on Menta Stream (Reggio Calabria, Italy) — Giuseppe Barbaro, Paolo S. Calabrò, and Demetrio Moschella; 134 (4), 357-65 (2008).

Optimizing Retention Basin Networks — Quentin B. Travis and Larry W. Mays; 134 (5), 432-9 (2008).

Limits to Water Privatization — Stephen E. Draper; 134 (6), 493-503 (2008).

Water policy

Limits to Water Privatization — Stephen E. Draper; 134 (6), 493-503 (2008).

Water pollution

Incorporating Reliability into the Definition of the Margin of Safety in Total Maximum Daily Load Calculations — Samuela Franceschini and Christina W. Tsai; 134 (1), 34-44 (2008).

Design Optimization of River Sampling Network Using Genetic Algorithms — Huei-Tau Ouyang, Hsin Yu, Chin-Huang Lu, and Yuan-Hong Luo; 134 (1), 83-7 (2008).

Pollution Source Identification of Accidental Contamination in Water Distribution Networks — Cristiana Di Cristo and Angelo Leopardi; 134 (2), 197-202 (2008).

How to Include Economic Analysis in TMDL Allocation — Arjumand Z. Zaidi, Sharon M. deMonsabert, and Raed El-Farhan; 134 (3), 214-23 (2008).

Inexact Chance-Constrained Linear Programming Model for Optimal Water Pollution Management at the Watershed Scale — Yong Liu, Huaicheng Guo, Feng Zhou, Xiaosheng Qin, Kai Huang, and Yajuan Yu; 134 (4), 347-56 (2008).

Multiobjective Contaminant Sensor Network Design for Water Distribution Systems — Ami Preis and Avi Ostfeld; 134 (4), 366-77 (2008).

Identifying Sets of Key Nodes for Placing Sensors in Dynamic Water Distribution Networks — Jianhua Xu, Paul S. Fischbeck, Mitchell J. Small, Jeanne M. VanBriesen, and Elizabeth Casman; 134 (4), 378-85 (2008).

Heuristic Approach for Operational Response to Drinking Water Contamination — Annie Poulin, Alain Mailhot, Patrice Grondin, Louis Delorme, Nathalie Periche, and Jean-Pierre Villeneuve; 134 (5), 457-65 (2008).

Efficient Sensor Placement Optimization for Securing Large Water Distribution Networks — Andreas Krause, Jure Leskovec, Carlos Guestrin, Jeanne VanBriesen, and Christos Faloutsos; 134 (6), 516-26 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Water quality

Incorporating Reliability into the Definition of the Margin of Safety in Total Maximum Daily Load Calculations — Samuela Franceschini and Christina W. Tsai; 134 (1), 34-44 (2008).

Combining Real-Time Bacteria Models and Uncertainty Analysis for Establishing Health Advisories for Recreational Waters — Matthew G. Heberger, John L. Durant, Kimberly A. Oriel, Paul H. Kirshen, and Lee Minardi; 134 (1), 73-82 (2008).

Using Bayesian Statistics to Estimate Chlorine Wall Decay Coefficients for Water Supply System — Jinhui Jeanne Huang and Edward Arthur McBean; 134 (2), 129-37 (2008).

Pollution Source Identification of Accidental Contamination in Water Distribution Networks — Cristiana Di Cristo and Angelo Leopardi; 134 (2), 197-202 (2008).

How to Include Economic Analysis in TMDL Allocation — Arjumand Z. Zaidi, Sharon M. deMonsabert, and Raed El-Farhan; 134 (3), 214-23 (2008).

Mixing at Cross Junctions in Water Distribution Systems. II: Experimental Study — R. G. Austin, B. van Bloemen Waanders, S. McKenna, and C. Y. Choi; 134 (3), 295-302 (2008).

Water Distribution System Aggregation for Water Quality Analysis — Lina Perelman and Avi Ostfeld; 134 (3), 303-9 (2008).

Water Quality Model Calibration under Unknown Demands — P. M. R. Jonkergouw, S.-T. Khu, Z. S. Kapelan, and D. A. Savić; 134 (4), 326-36 (2008).

Identifying Sets of Key Nodes for Placing Sensors in Dynamic Water Distribution Networks — Jianhua Xu, Paul S. Fischbeck, Mitchell J. Small, Jeanne M. VanBriesen, and Elizabeth Casman; 134 (4), 378-85 (2008).

Consequence Management Utilizing Optimization — T. M. Baranowski and E. J. LeBoeuf; 134 (4), 386-94 (2008).

Importance of Exposure Model in Estimating Impacts When a Water Distribution System Is Contaminated — Michael J. Davis and Robert Janke; 134 (5), 449-56 (2008).

Evaluation of a Modeling Approach to Assess Nitrogen Assimilative Capacity due to River Restoration — Karin Peternel-Staggs, Laurel Saito, and Christian H. Fritsen; 134 (5), 474-86 (2008).

Water resources

Optimization of Hedging Rules for Reservoir Operations — Ming-Yen Tu, Nien-Sheng Hsu, Frank T.-C. Tsai, and William W.-G. Yeh; 134 (1), 3-13 (2008).

Peak Daily Water Demand Forecast Modeling Using Artificial Neural Networks — Jan Franklin Adamowski; 134 (2), 119-28 (2008).

Estimating the Impacts and Uncertainty of Climate Change on a Municipal Water Supply System — Matthew W. Wiley and Richard N. Palmer; 134 (3), 239-46 (2008).

Use of Multiobjective Particle Swarm Optimization in Water Resources Management — Alexandre M. Baltar and Darrell G. Fontane; 134 (3), 257-65 (2008).

Extended OWA Operator for Group Decision Making on Water Resources Projects — M. Zarghami, R. Ardakanian, A. Memariani, and F. Szidarovszky; 134 (3), 266-75 (2008).

Game Theoretical Approach to Conflict Resolution in Transboundary Water Resources Management — Eleni Eleftheriadou and Yannis Mylopoulos; 134 (5), 466-73 (2008).

Standard Interactive Genetic Algorithm—Comprehensive Optimization Framework for Groundwater Monitoring Design — Meghna Babbar-Sebens and Barbara Minsker; 134 (6), 538-47 (2008).

Water rights

Limits to Water Privatization — Stephen E. Draper; 134 (6), 493-503 (2008).

Water supply

Optimization of Hedging Rules for Reservoir Operations — Ming-Yen Tu, Nien-Sheng Hsu, Frank T.-C. Tsai, and William W.-G. Yeh; 134 (1), 3-13 (2008).

Urban Water Management in Ancient Greece: Legacies and Lessons — D. Koutsoyiannis, N. Zarkadoulas, A. N. Angelakis, and G. Tchobanoglous; 134 (1), 45-54 (2008).

Optimal Design of Water Networks Using a Modified Genetic Algorithm with Reduction in Search Space — Mahendra S. Kadu, Rajesh Gupta, and Pramod R. Bhave; 134 (2), 147-60 (2008).

State Estimation in Water Distribution Networks Using Graph-Theoretic Reduction Strategy — S. Mohan Kumar, Shankar Narasimhan, and S. Murty Bhallamudi; 134 (5), 395-403 (2008).

Solving Unconfined Groundwater Flow Management Problems with Successive Linear Programming — David P. Ahlfeld and Gemma

Baro-Montes; 134 (5), 404-12 (2008).

Integrating Long- and Short-Term Reservoir Operation Models via Stochastic and Deterministic Optimization: Case Study in Japan — Alcigeimes Batista Celeste, Koichi Suzuki, and Akihiro Kadota; 134 (5), 440-8 (2008).

Water yield

Estimating the Impacts and Uncertainty of Climate Change on a Municipal Water Supply System — Matthew W. Wiley and Richard N. Palmer; 134 (3), 239-46 (2008).

Watershed management

Uncertainty Analysis for Watershed Modeling Using Generalized Likelihood Uncertainty Estimation with Multiple Calibration Measures — Yanbing Jia and Teresa B. Culver; 134 (2), 97-106 (2008).

How to Include Economic Analysis in TMDL Allocation — Arjumand Z. Zaidi, Sharon M. deMonsabert, and Raed El-Farhan; 134 (3), 214-23 (2008).

Inexact Chance-Constrained Linear Programming Model for Optimal Water Pollution Management at the Watershed Scale — Yong Liu, Huaicheng Guo, Feng Zhou, Xiaosheng Qin, Kai Huang, and Yajuan Yu; 134 (4), 347-56 (2008).

Watersheds

Optimizing Retention Basin Networks — Quentin B. Travis and Larry W. Mays; 134 (5), 432-9 (2008).

Wells

Practical Remedial Design Optimization for Large Complex Plumes — Richard C. Peralta, Ineke M. Kalwij, and Shengjun Wu; 134 (5), 422-31 (2008).

Author Index

Adamowski, Jan Franklin
Peak Daily Water Demand Forecast Modeling Using Artificial Neural Networks — Jan Franklin Adamowski; 134 (2), 119-28 (2008).

Afzali, Raheleh
Reliability-Based Simulation-Optimization Model for Multireservoir Hydropower Systems Operations: Khersan Experience — Raheleh Afzali, Seyed Jamshid Mousavi, and Abbas Ghaheri; 134 (1), 24-33 (2008).

Ahlfeld, David P.
Solving Unconfined Groundwater Flow Management Problems with Successive Linear Programming — David P. Ahlfeld and Gemma Baro-Montes; 134 (5), 404-12 (2008).

An, Hyunhee
Hydrologic and Economic Implications of Climate Change for Typical River Basins of the Agricultural Midwestern United States — Hua Xie, J. Wayland Eheart, and Hyunhee An; 134 (3), 205-13 (2008).

Angelakis, A. N.
Urban Water Management in Ancient Greece: Legacies and Lessons — D. Koutsoyiannis, N. Zarkadoulas, A. N. Angelakis, and G. Tchobanoglous; 134 (1), 45-54 (2008).

Aral, Mustafa M.
Genetic Algorithm for Constrained Optimization Models and Its Application in Groundwater Resources Management — Jiabao Guan, Elcin Kentel, and Mustafa M. Aral; 134 (1), 64-72 (2008).

Ardakanian, R.
Extended OWA Operator for Group Decision Making on Water Resources Projects — M. Zarghami, R. Ardakanian, A. Memariani, and F. Szidarovszky; 134 (3), 266-75 (2008).

Austin, R. G.
Mixing at Cross Junctions in Water Distribution Systems. II: Experimental Study — R. G. Austin, B. van Bloemen Waanders, S. McKenna, and C. Y. Choi; 134 (3), 295-302 (2008).

Babbar-Sebens, Meghna
Standard Interactive Genetic Algorithm—Comprehensive Optimization Framework for Groundwater Monitoring Design — Meghna Babbar-Sebens and Barbara Minsker; 134 (6), 538-47 (2008).

Baltar, Alexandre M.
Use of Multiobjective Particle Swarm Optimization in Water Resources Management — Alexandre M. Baltar and Darrell G. Fontane; 134 (3), 257-65 (2008).

Baños, R.
Optimal Design of Gravity-Fed Looped Water Distribution Networks Considering the Resilience Index — J. Reca, J. Martínez, R. Baños, and C. Gil; 134 (3), 234-8 (2008).

Baranowski, T. M.
Consequence Management Utilizing Optimization — T. M. Baranowski and E. J. LeBoeuf; 134 (4), 386-94 (2008).

Barbaro, Giuseppe
Evaluation of the Minimum Discharge from the Dam on Menta Stream (Reggio Calabria, Italy) — Giuseppe Barbaro, Paolo S. Calabrò, and Demetrio Moschella; 134 (4), 357-65 (2008).

Barbosa, Paulo S. F.
Planning and Operation of Large-Scale Water Distribution Systems with Preemptive Priorities — Mario T. L. Barros, Renato C. Zambon, Paulo S. F. Barbosa, and William W.-G. Yeh; 134 (3), 247-56 (2008).

Barkdoll, Brian D.
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Baro-Montes, Gemma
Solving Unconfined Groundwater Flow Management Problems with Successive Linear Programming — David P. Ahlfeld and Gemma Baro-Montes; 134 (5), 404-12 (2008).

Barros, Mario T. L.
Planning and Operation of Large-Scale Water Distribution Systems with Preemptive Priorities — Mario T. L. Barros, Renato C. Zambon, Paulo S. F. Barbosa, and William W.-G. Yeh; 134 (3), 247-56 (2008).

Berry, Jonathan W.
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Bhallamudi, S. Murty
State Estimation in Water Distribution Networks Using Graph-Theoretic Reduction Strategy — S. Mohan Kumar, Shankar Narasimhan, and S. Murty Bhallamudi; 134 (5), 395-403 (2008).

Bhave, Pramod R.
Optimal Design of Water Networks Using a Modified Genetic Algorithm with Reduction in Search Space — Mahendra S. Kadu, Rajesh Gupta, and Pramod R. Bhave; 134 (2), 147-60 (2008).

Blackmore, Jane M.
Risk and Resilience to Enhance Sustainability with Application to Urban Water Systems — Jane M. Blackmore and Roel A. J. Plant; 134 (3), 224-33 (2008).

Bray, Benjamin S.
Improving Seawater Barrier Operation with Simulation Optimization in Southern California — Benjamin S. Bray and William W.-G. Yeh; 134 (2), 171-80 (2008).

Calabrò, Paolo S.
Evaluation of the Minimum Discharge from the Dam on Menta Stream (Reggio Calabria, Italy) — Giuseppe Barbaro, Paolo S. Calabrò, and Demetrio Moschella; 134 (4), 357-65 (2008).

Casman, Elizabeth
Identifying Sets of Key Nodes for Placing Sensors in Dynamic Water Distribution Networks — Jianhua Xu, Paul S. Fischbeck, Mitchell J. Small, Jeanne M. VanBriesen, and Elizabeth Casman; 134 (4), 378-85 (2008).

Celeste, Alcigeimes Batista
Integrating Long- and Short-Term Reservoir Operation Models via Stochastic and Deterministic Optimization: Case Study in Japan — Alcigeimes Batista Celeste, Koichi Suzuki, and Akihiro Kadota; 134 (5), 440-8 (2008).

Choi, C. Y.
Mixing at Cross Junctions in Water Distribution Systems. I: Numerical Study — P. Romero-Gomez, C. K. Ho, and C. Y. Choi; 134 (3), 285-94 (2008).
Mixing at Cross Junctions in Water Distribution Systems. II: Experimental Study — R. G. Austin, B. van Bloemen Waanders, S. McKenna, and C. Y. Choi; 134 (3), 295-302 (2008).

Coulbeck, B.
Modeling the Efficiency and Power Characteristics of a Pump Group — B. Ulanicki, J. Kahler, and B. Coulbeck; 134 (1), 88-93 (2008).

Culver, Teresa B.
Uncertainty Analysis for Watershed Modeling Using Generalized Likelihood Uncertainty Estimation with Multiple Calibration Measures — Yanbing Jia and Teresa B. Culver; 134 (2), 97-106 (2008).

Das, Amlan
Chance Constrained Optimal Design of Trapezoidal Channels — Amlan Das; 134 (3), 310-3 (2008).

Davis, Michael J.
Importance of Exposure Model in Estimating Impacts When a Water Distribution System Is Contaminated — Michael J. Davis and Robert Janke; 134 (5), 449-56 (2008).

Delorme, Louis
Heuristic Approach for Operational Response to Drinking Water Contamination — Annie Poulin, Alain Mailhot, Patrice Grondin, Louis Delorme, Nathalie Periche, and Jean-Pierre Villeneuve; 134 (5), 457-65 (2008).
deMonsabert, Sharon M.
How to Include Economic Analysis in TMDL Allocation — Arjumand Z. Zaidi, Sharon M. deMonsabert, and Raed El-Farhan; 134 (3), 214-23 (2008).
Di Cristo, Cristiana
Pollution Source Identification of Accidental Contamination in Water Distribution Networks — Cristiana Di Cristo and Angelo Leopardi; 134 (2), 197-202 (2008).
di Pierro, Francesco
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).
Dorini, Gianluca
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).
Draper, Stephen E.
Limits to Water Privatization — Stephen E. Draper; 134 (6), 493-503 (2008).
Durant, John L.
Combining Real-Time Bacteria Models and Uncertainty Analysis for Establishing Health Advisories for Recreational Waters — Matthew G. Heberger, John L. Durant, Kimberly A. Oriel, Paul H. Kirshen, and Lee Minardi; 134 (1), 73-82 (2008).
Eheart, J. Wayland
Hydrologic and Economic Implications of Climate Change for Typical River Basins of the Agricultural Midwestern United States — Hua Xie, J. Wayland Eheart, and Hyunhee An; 134 (3), 205-13 (2008).
Eleftheriadou, Eleni
Game Theoretical Approach to Conflict Resolution in Transboundary Water Resources Management — Eleni Eleftheriadou and Yannis Mylopoulos; 134 (5), 466-73 (2008).
El-Farhan, Raed
How to Include Economic Analysis in TMDL Allocation — Arjumand Z. Zaidi, Sharon M. deMonsabert, and Raed El-Farhan; 134 (3), 214-23 (2008).
Eliades, Demetrios
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).
Endreny, T.
Adding Radar Rainfall and Calibration to the TR-20 Watershed Model to Improve Dam Removal Flood Analysis — T. Endreny and M. Higgins; 134 (3), 314-7 (2008).
Faloutsos, Christos
Efficient Sensor Placement Optimization for Securing Large Water Distribution Networks — Andreas Krause, Jure Leskovec, Carlos Guestrin, Jeanne VanBriesen, and Christos Faloutsos; 134 (6), 516-26 (2008).
Fernandes, Ana Martha
Optimal Siting of Regional Fecal Sludge Treatment Facilities: St. Elizabeth, Jamaica — Ana Martha Fernandes, Paul Kirshen, and Richard M. Vogel; 134 (1), 55-63 (2008).
Fischbeck, Paul
Identifying Sets of Key Nodes for Placing Sensors in Dynamic Water Distribution Networks — Jianhua Xu, Paul S. Fischbeck, Mitchell J. Small, Jeanne M. VanBriesen, and Elizabeth Casman; 134 (4), 378-85 (2008).
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).
Fontane, Darrell G.
Spatial Knowledge-Based Decision Analysis System for Pond Site Assessment — Cat Shrier, Darrell Fontane, and Luis Garcia; 134 (1), 14-23 (2008).
Use of Multiobjective Particle Swarm Optimization in Water Resources Management — Alexandre M. Baltar and Darrell G. Fontane; 134 (3), 257-65 (2008).
Franceschini, Samuela
Incorporating Reliability into the Definition of the Margin of Safety in Total Maximum Daily Load Calculations — Samuela Franceschini and Christina W. Tsai; 134 (1), 34-44 (2008).
Fritsen, Christian H.
Evaluation of a Modeling Approach to Assess Nitrogen Assimilative Capacity due to River Restoration — Karin Peternel-Staggs, Laurel Saito, and Christian H. Fritsen; 134 (5), 474-86 (2008).
Garcia, Luis
Spatial Knowledge-Based Decision Analysis System for Pond Site Assessment — Cat Shrier, Darrell Fontane, and Luis Garcia; 134 (1), 14-23 (2008).
Ghaheri, Abbas
Reliability-Based Simulation-Optimization Model for Multireservoir Hydropower Systems Operations: Khersan Experience — Raheleh Afzali, Seyed Jamshid Mousavi, and Abbas Ghaheri; 134 (1), 24-33 (2008).
Ghiassi, M.
Urban Water Demand Forecasting with a Dynamic Artificial Neural Network Model — M. Ghiassi, David K. Zimbra, and H. Saidane; 134 (2), 138-46 (2008).
Ghimire, Santosh R.
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).
Gil, C.
Optimal Design of Gravity-Fed Looped Water Distribution Networks Considering the Resilience Index — J. Reca, J. Martínez, R. Baños, and C. Gil; 134 (3), 234-8 (2008).
Giustolisi, Orazio
Extended Period Simulation Analysis Considering Valve Shutdowns — Orazio Giustolisi, Zoran Kapelan, and Dragan Savic; 134 (6), 527-37 (2008).
Grondin, Patrice
Heuristic Approach for Operational Response to Drinking Water Contamination — Annie Poulin, Alain Mailhot, Patrice Grondin, Louis Delorme, Nathalie Periche, and Jean-Pierre Villeneuve; 134 (5), 457-65 (2008).
Guan, Jiabao
Genetic Algorithm for Constrained Optimization Models and Its Application in Groundwater Resources Management — Jiabao Guan, Elcin Kentel, and Mustafa M. Aral; 134 (1), 64-72 (2008).

Gueli, Roberto
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Guercio, Roberto
Spatial and Temporal Scaling Properties of Water Demand — Roberto Magini, Isabella Pallavicini, and Roberto Guercio; 134 (3), 276-84 (2008).

Guestrin, Carlos
Efficient Sensor Placement Optimization for Securing Large Water Distribution Networks — Andreas Krause, Jure Leskovec, Carlos Guestrin, Jeanne VanBriesen, and Christos Faloutsos; 134 (6), 516-26 (2008).
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Guo, Huaicheng
Inexact Chance-Constrained Linear Programming Model for Optimal Water Pollution Management at the Watershed Scale — Yong Liu, Huaicheng Guo, Feng Zhou, Xiaosheng Qin, Kai Huang, and Yajuan Yu; 134 (4), 347-56 (2008).

Guo, Y. F.
Efficient Multiobjective Storm Sewer Design Using Cellular Automata and Genetic Algorithm Hybrid — Y. F. Guo, G. A. Walters, S. T. Khu, and E. C. Keedwell; 134 (6), 511-5 (2008).

Gupta, Rajesh
Optimal Design of Water Networks Using a Modified Genetic Algorithm with Reduction in Search Space — Mahendra S. Kadu, Rajesh Gupta, and Pramod R. Bhave; 134 (2), 147-60 (2008).

Hart, William E.
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Heberger, Matthew G.
Combining Real-Time Bacteria Models and Uncertainty Analysis for Establishing Health Advisories for Recreational Waters — Matthew G. Heberger, John L. Durant, Kimberly A. Oriel, Paul H. Kirshen, and Lee Minardi; 134 (1), 73-82 (2008).

Higgins, M.
Adding Radar Rainfall and Calibration to the TR-20 Watershed Model to Improve Dam Removal Flood Analysis — T. Endreny and M. Higgins; 134 (3), 314-7 (2008).

Ho, C. K.
Mixing at Cross Junctions in Water Distribution Systems. I: Numerical Study — P. Romero-Gomez, C. K. Ho, and C. Y. Choi; 134 (3), 285-94 (2008).

Hsu, Nien-Sheng
Optimization of Hedging Rules for Reservoir Operations — Ming-Yen Tu, Nien-Sheng Hsu, Frank T.-C. Tsai, and William W.-G. Yeh; 134 (1), 3-13 (2008).

Huang, Jinhui J.
Using Bayesian Statistics to Estimate Chlorine Wall Decay Coefficients for Water Supply System — Jinhui Jeanne Huang and Edward Arthur McBean; 134 (2), 129-37 (2008).
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Huang, Kai
Inexact Chance-Constrained Linear Programming Model for Optimal Water Pollution Management at the Watershed Scale — Yong Liu, Huaicheng Guo, Feng Zhou, Xiaosheng Qin, Kai Huang, and Yajuan Yu; 134 (4), 347-56 (2008).

Iglesias-Rey, Pedro L.
Hydraulic Analysis of Peak Demand in Looped Water Distribution Networks — Javier Martínez-Solano, Pedro L. Iglesias-Rey, Rafael Pérez-García, and P. Amparo López-Jiménez; 134 (6), 504-10 (2008).

Isovitsch, Shannon L.
Sensor Placement and Optimization Criteria Dependencies in a Water Distribution System — Shannon L. Isovitsch and Jeanne M. VanBriesen; 134 (2), 186-96 (2008).
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Jain, S. K.
Discussion of "Drought Storage Allocation Rules for Surface Reservoir Systems" by J. R. Lund
October 2006, Vol. 132, No. (5), , pp. 395–397. 10.1061/(ASCE)0733-9496(2006)132:5(395) — S. K. Jain; 134 (5), 487-8 (2008).

James, William
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Janke, Robert
Importance of Exposure Model in Estimating Impacts When a Water Distribution System Is Contaminated — Michael J. Davis and Robert Janke; 134 (5), 449-56 (2008).

Jia, Yanbing
Uncertainty Analysis for Watershed Modeling Using Generalized Likelihood Uncertainty Estimation with Multiple Calibration Measures — Yanbing Jia and Teresa B. Culver; 134 (2), 97-106 (2008).

Jonkergouw, P. M. R.
Water Quality Model Calibration under Unknown Demands — P. M. R. Jonkergouw, S.-T. Khu, Z. S. Kapelan, and D. A. Savić; 134 (4), 326-36 (2008).
The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fisch-

beck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Kadota, Akihiro

Integrating Long- and Short-Term Reservoir Operation Models via Stochastic and Deterministic Optimization: Case Study in Japan — Alcigeimes Batista Celeste, Koichi Suzuki, and Akihiro Kadota; 134 (5), 440-8 (2008).

Kadu, Mahendra S.

Optimal Design of Water Networks Using a Modified Genetic Algorithm with Reduction in Search Space — Mahendra S. Kadu, Rajesh Gupta, and Pramod R. Bhave; 134 (2), 147-60 (2008).

Kahler, J.

Modeling the Efficiency and Power Characteristics of a Pump Group — B. Ulanicki, J. Kahler, and B. Coulbeck; 134 (1), 88-93 (2008).

Kalwij, Ineke M.

Practical Remedial Design Optimization for Large Complex Plumes — Richard C. Peralta, Ineke M. Kalwij, and Shengjun Wu; 134 (5), 422-31 (2008).

Kapelan, Z. S.

Water Quality Model Calibration under Unknown Demands — P. M. R. Jonkergouw, S.-T. Khu, Z. S. Kapelan, and D. A. Savić; 134 (4), 326-36 (2008).

Extended Period Simulation Analysis Considering Valve Shutdowns — Orazio Giustolisi, Zoran Kapelan, and Dragan Savic; 134 (6), 527-37 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Keedwell, E. C.

Efficient Multiobjective Storm Sewer Design Using Cellular Automata and Genetic Algorithm Hybrid — Y. F. Guo, G. A. Walters, S. T. Khu, and E. C. Keedwell; 134 (6), 511-5 (2008).

Kentel, Elcin

Genetic Algorithm for Constrained Optimization Models and Its Application in Groundwater Resources Management — Jiabao Guan, Elcin Kentel, and Mustafa M. Aral; 134 (1), 64-72 (2008).

Khu, S. T.

Water Quality Model Calibration under Unknown Demands — P. M. R. Jonkergouw, S.-T. Khu, Z. S. Kapelan, and D. A. Savić; 134 (4), 326-36 (2008).

Efficient Multiobjective Storm Sewer Design Using Cellular Automata and Genetic Algorithm Hybrid — Y. F. Guo, G. A. Walters, S. T. Khu, and E. C. Keedwell; 134 (6), 511-5 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Kirshen, Paul

Optimal Siting of Regional Fecal Sludge Treatment Facilities: St. Elizabeth, Jamaica — Ana Martha Fernandes, Paul Kirshen, and Richard M. Vogel; 134 (1), 55-63 (2008).

Combining Real-Time Bacteria Models and Uncertainty Analysis for Establishing Health Advisories for Recreational Waters — Matthew G. Heberger, John L. Durant, Kimberly A. Oriel, Paul H. Kirshen, and Lee Minardi; 134 (1), 73-82 (2008).

Ko, Nak-Youl

Reliability and Remediation Cost of Optimal Remediation Design Considering Uncertainty in Aquifer Parameters — Nak-Youl Ko and Kang-Kun Lee; 134 (5), 413-21 (2008).

Koutsoyiannis, D.

Urban Water Management in Ancient Greece: Legacies and Lessons — D. Koutsoyiannis, N. Zarkadoulas, A. N. Angelakis, and G. Tchobanoglous; 134 (1), 45-54 (2008).

Krause, Andreas

Efficient Sensor Placement Optimization for Securing Large Water Distribution Networks — Andreas Krause, Jure Leskovec, Carlos Guestrin, Jeanne VanBriesen, and Christos Faloutsos; 134 (6), 516-26 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Kumar, S. Mohan

State Estimation in Water Distribution Networks Using Graph-Theoretic Reduction Strategy — S. Mohan Kumar, Shankar Narasimhan, and S. Murty Bhallamudi; 134 (5), 395-403 (2008).

LeBoeuf, E. J.

Consequence Management Utilizing Optimization — T. M. Baranowski and E. J. LeBoeuf; 134 (4), 386-94 (2008).

Lee, Kang-Kun

Reliability and Remediation Cost of Optimal Remediation Design Considering Uncertainty in Aquifer Parameters — Nak-Youl Ko and Kang-Kun Lee; 134 (5), 413-21 (2008).

le Gat, Yves

Sizing Municipal Storage Tanks Based on Reliability Criteria — Jakobus E. van Zyl, Olivier Piller, and Yves le Gat; 134 (6), 548-55 (2008).

Leopardi, Angelo

Pollution Source Identification of Accidental Contamination in Water Distribution Networks — Cristiana Di Cristo and Angelo Leopardi; 134 (2), 197-202 (2008).

Leskovec, Jure

Efficient Sensor Placement Optimization for Securing Large Water Distribution Networks — Andreas Krause, Jure Leskovec, Carlos Guestrin, Jeanne VanBriesen, and Christos Faloutsos; 134 (6), 516-26 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Lettenmaier, Dennis P.

Have We Dropped the Ball on Water Resources Research? — Dennis P. Lettenmaier; 134 (6), 491-2 (2008).

Liu, Yong

Inexact Chance-Constrained Linear Programming Model for Optimal Water Pollution Management at the Watershed Scale — Yong Liu, Huaicheng Guo, Feng Zhou, Xiaosheng Qin, Kai Huang, and Yajuan Yu; 134 (4), 347-56 (2008).

López-Ibáñez, Manuel

Ant Colony Optimization for Optimal Control of Pumps in Water Distribution Networks — Manuel López-Ibáñez, T. Devi Prasad, and Ben Paechter; 134 (4), 337-46 (2008).

López-Jiménez, P. Amparo

Hydraulic Analysis of Peak Demand in Looped Water Distribution Networks — Javier Martínez-Solano, Pedro L. Iglesias-Rey, Rafael Pérez-García, and P. Amparo López-Jiménez; 134 (6), 504-10 (2008).

Lu, Chin-Huang

Design Optimization of River Sampling Network Using Genetic Algorithms — Huei-Tau Ouyang, Hsin Yu, Chin-Huang Lu, and Yuan-Hong Luo; 134 (1), 83-7 (2008).

Lund, Jay R.

Closure to "Drought Storage Allocation Rules for Surface Reservoir Systems" by Jay R. Lund — Jay R. Lund; 134 (5), 488-9 (2008).

Luo, Yuan-Hong

Design Optimization of River Sampling Network Using Genetic Algorithms — Huei-Tau Ouyang, Hsin Yu, Chin-Huang Lu, and Yuan-Hong Luo; 134 (1), 83-7 (2008).

Magini, Roberto

Spatial and Temporal Scaling Properties of Water Demand — Roberto Magini, Isabella Pallavi-

cini, and Roberto Guercio; 134 (3), 276-84 (2008).

Maidment, David R.

Bringing Water Data Together — David R. Maidment; 134 (2), 95-6 (2008).

Mailhot, Alain

Heuristic Approach for Operational Response to Drinking Water Contamination — Annie Poulin, Alain Mailhot, Patrice Grondin, Louis Delorme, Nathalie Periche, and Jean-Pierre Villeneuve; 134 (5), 457-65 (2008).

Martínez, J.

Optimal Design of Gravity-Fed Looped Water Distribution Networks Considering the Resilience Index — J. Reca, J. Martínez, R. Baños, and C. Gil; 134 (3), 234-8 (2008).

Martínez-Solano, Javier

Hydraulic Analysis of Peak Demand in Looped Water Distribution Networks — Javier Martínez-Solano, Pedro L. Iglesias-Rey, Rafael Pérez-García, and P. Amparo López-Jiménez; 134 (6), 504-10 (2008).

Mays, Larry W.

Optimizing Retention Basin Networks — Quentin B. Travis and Larry W. Mays; 134 (5), 432-9 (2008).

McBean, Edward A.

Using Bayesian Statistics to Estimate Chlorine Wall Decay Coefficients for Water Supply System — Jinhui Jeanne Huang and Edward Arthur McBean; 134 (2), 129-37 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

McKenna, S.

Mixing at Cross Junctions in Water Distribution Systems. II: Experimental Study — R. G. Austin, B. van Bloemen Waanders, S. McKenna, and C. Y. Choi; 134 (3), 295-302 (2008).

McPhee, James

Groundwater Management Using Model Reduction via Empirical Orthogonal Functions — James McPhee and William W.-G. Yeh; 134 (2), 161-70 (2008).

Memariani, A.

Extended OWA Operator for Group Decision Making on Water Resources Projects — M. Zarghami, R. Ardakanian, A. Memariani, and F. Szidarovszky; 134 (3), 266-75 (2008).

Minardi, Lee

Combining Real-Time Bacteria Models and Uncertainty Analysis for Establishing Health Advisories for Recreational Waters — Matthew G. Heberger, John L. Durant, Kimberly A. Oriel, Paul H. Kirshen, and Lee Minardi; 134 (1), 73-82 (2008).

Minsker, Barbara

Standard Interactive Genetic Algorithm—Comprehensive Optimization Framework for Groundwater Monitoring Design — Meghna Babbar-Sebens and Barbara Minsker; 134 (6), 538-47 (2008).

Moschella, Demetrio

Evaluation of the Minimum Discharge from the Dam on Menta Stream (Reggio Calabria, Italy) — Giuseppe Barbaro, Paolo S. Calabrò, and Demetrio Moschella; 134 (4), 357-65 (2008).

Mousavi, Seyed Jamshid

Reliability-Based Simulation-Optimization Model for Multireservoir Hydropower Systems Operations: Khersan Experience — Raheleh Afzali, Seyed Jamshid Mousavi, and Abbas Ghaheri; 134 (1), 24-33 (2008).

Mylopoulos, Yannis

Game Theoretical Approach to Conflict Resolution in Transboundary Water Resources Management — Eleni Eleftheriadou and Yannis Mylopoulos; 134 (5), 466-73 (2008).

Narasimhan, Shankar

State Estimation in Water Distribution Networks Using Graph-Theoretic Reduction Strategy — S. Mohan Kumar, Shankar Narasimhan, and S. Murty Bhallamudi; 134 (5), 395-403 (2008).

Oriel, Kimberly A.

Combining Real-Time Bacteria Models and Uncertainty Analysis for Establishing Health Advisories for Recreational Waters — Matthew G. Heberger, John L. Durant, Kimberly A. Oriel, Paul H. Kirshen, and Lee Minardi; 134 (1), 73-82 (2008).

Ostfeld, Avi

Ant Colony Optimization for Least-Cost Design and Operation of Pumping Water Distribution Systems — Avi Ostfeld and Ariel Tubaltzev; 134 (2), 107-18 (2008).

Water Distribution System Aggregation for Water Quality Analysis — Lina Perelman and Avi Ostfeld; 134 (3), 303-9 (2008).

Multiobjective Contaminant Sensor Network Design for Water Distribution Systems — Ami Preis and Avi Ostfeld; 134 (4), 366-77 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Ouyang, Huei-Tau

Design Optimization of River Sampling Network Using Genetic Algorithms — Huei-Tau Ouyang, Hsin Yu, Chin-Huang Lu, and Yuan-Hong Luo; 134 (1), 83-7 (2008).

Paechter, Ben

Ant Colony Optimization for Optimal Control of Pumps in Water Distribution Networks — Manuel López-Ibáñez, T. Devi Prasad, and Ben Paechter; 134 (4), 337-46 (2008).

Pallavicini, Isabella

Spatial and Temporal Scaling Properties of Water Demand — Roberto Magini, Isabella Pallavicini, and Roberto Guercio; 134 (3), 276-84 (2008).

Palmer, Richard N.

It's Time for Standards of Practice in Water Resources Planning — William J. Werick and Richard N. Palmer; 134 (1), 1-2 (2008).

Estimating the Impacts and Uncertainty of Climate Change on a Municipal Water Supply System — Matthew W. Wiley and Richard N. Palmer; 134 (3), 239-46 (2008).

Peralta, Richard C.

Practical Remedial Design Optimization for Large Complex Plumes — Richard C. Peralta, Ineke M. Kalwij, and Shengjun Wu; 134 (5), 422-31 (2008).

Perelman, Lina

Water Distribution System Aggregation for Water Quality Analysis — Lina Perelman and Avi Ostfeld; 134 (3), 303-9 (2008).

Pérez-García, Rafael

Hydraulic Analysis of Peak Demand in Looped Water Distribution Networks — Javier Martínez-Solano, Pedro L. Iglesias-Rey, Rafael Pérez-García, and P. Amparo López-Jiménez; 134 (6), 504-10 (2008).

Periche, Nathalie

Heuristic Approach for Operational Response to Drinking Water Contamination — Annie Poulin, Alain Mailhot, Patrice Grondin, Louis Delorme, Nathalie Periche, and Jean-Pierre Villeneuve; 134 (5), 457-65 (2008).

Peternel-Staggs, Karin

Evaluation of a Modeling Approach to Assess Nitrogen Assimilative Capacity due to River Restoration — Karin Peternel-Staggs, Laurel Saito, and Christian H. Fritsen; 134 (5), 474-86 (2008).

Phillips, Cindy A.

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Piller, Olivier

Sizing Municipal Storage Tanks Based on Reliability Criteria — Jakobus E. van Zyl, Olivier Piller, and Yves le Gat; 134 (6), 548-55 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou,

Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Plant, Roel A. J.

Risk and Resilience to Enhance Sustainability with Application to Urban Water Systems — Jane M. Blackmore and Roel A. J. Plant; 134 (3), 224-33 (2008).

Polycarpou, Marios

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Poulin, Annie

Heuristic Approach for Operational Response to Drinking Water Contamination — Annie Poulin, Alain Mailhot, Patrice Grondin, Louis Delorme, Nathalie Periche, and Jean-Pierre Villeneuve; 134 (5), 457-65 (2008).

Prasad, T. Devi

Ant Colony Optimization for Optimal Control of Pumps in Water Distribution Networks — Manuel López-Ibáñez, T. Devi Prasad, and Ben Paechter; 134 (4), 337-46 (2008).

Preis, Ami

Multiobjective Contaminant Sensor Network Design for Water Distribution Systems — Ami Preis and Avi Ostfeld; 134 (4), 366-77 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Propato, Marco

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Qin, Xiaosheng

Inexact Chance-Constrained Linear Programming Model for Optimal Water Pollution Management at the Watershed Scale — Yong Liu, Huaicheng Guo, Feng Zhou, Xiaosheng Qin, Kai Huang, and Yajuan Yu; 134 (4), 347-56 (2008).

Reca, J.

Optimal Design of Gravity-Fed Looped Water Distribution Networks Considering the Resilience Index — J. Reca, J. Martínez, R. Baños, and C. Gil; 134 (3), 234-8 (2008).

Rogers, Peter

Coping with Global Warming and Climate Change — Peter Rogers; 134 (3), 203-4 (2008).

Romero-Gomez, P.

Mixing at Cross Junctions in Water Distribution Systems. I: Numerical Study — P. Romero-Gomez, C. K. Ho, and C. Y. Choi; 134 (3), 285-94 (2008).

Saidane, H.

Urban Water Demand Forecasting with a Dynamic Artificial Neural Network Model — M. Ghiassi, David K. Zimbra, and H. Saidane; 134 (2), 138-46 (2008).

Saito, Laurel

Evaluation of a Modeling Approach to Assess Nitrogen Assimilative Capacity due to River Restoration — Karin Peternel-Staggs, Laurel Saito, and Christian H. Fritsen; 134 (5), 474-86 (2008).

Salomons, Elad

Optimal Real-Time Operation of Urban Water Distribution Systems Using Reduced Models — Uri Shamir and Elad Salomons; 134 (2), 181-5 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Savić, Dragan A.

Water Quality Model Calibration under Unknown Demands — P. M. R. Jonkergouw, S.-T. Khu, Z. S. Kapelan, and D. A. Savić; 134 (4), 326-36 (2008).

Extended Period Simulation Analysis Considering Valve Shutdowns — Orazio Giustolisi, Zoran Kapelan, and Dragan Savic; 134 (6), 527-37 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Shamir, Uri

Optimal Real-Time Operation of Urban Water Distribution Systems Using Reduced Models — Uri Shamir and Elad Salomons; 134 (2), 181-5 (2008).

Shrier, Cat

Spatial Knowledge-Based Decision Analysis System for Pond Site Assessment — Cat Shrier, Darrell Fontane, and Luis Garcia; 134 (1), 14-23 (2008).

Small, Mitchell

Identifying Sets of Key Nodes for Placing Sensors in Dynamic Water Distribution Networks — Jianhua Xu, Paul S. Fischbeck, Mitchell J. Small, Jeanne M. VanBriesen, and Elizabeth Casman; 134 (4), 378-85 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Suzuki, Koichi

Integrating Long- and Short-Term Reservoir Operation Models via Stochastic and Deterministic Optimization: Case Study in Japan — Alcigeimes Batista Celeste, Koichi Suzuki, and Akihiro Kadota; 134 (5), 440-8 (2008).

Szidarovszky, F.

Extended OWA Operator for Group Decision Making on Water Resources Projects — M. Zarghami, R. Ardakanian, A. Memariani, and F. Szidarovszky; 134 (3), 266-75 (2008).

Tchobanoglous, G.

Urban Water Management in Ancient Greece: Legacies and Lessons — D. Koutsoyiannis, N. Zarkadoulas, A. N. Angelakis, and G. Tchobanoglous; 134 (1), 45-54 (2008).

Trachtman, Gary B.

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan

Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Travis, Quentin B.

Optimizing Retention Basin Networks — Quentin B. Travis and Larry W. Mays; 134 (5), 432-9 (2008).

Tsai, Christina W.

Incorporating Reliability into the Definition of the Margin of Safety in Total Maximum Daily Load Calculations — Samuela Franceschini and Christina W. Tsai; 134 (1), 34-44 (2008).

Tsai, Frank T.-C.

Optimization of Hedging Rules for Reservoir Operations — Ming-Yen Tu, Nien-Sheng Hsu, Frank T.-C. Tsai, and William W.-G. Yeh; 134 (1), 3-13 (2008).

Tu, Ming-Yen

Optimization of Hedging Rules for Reservoir Operations — Ming-Yen Tu, Nien-Sheng Hsu, Frank T.-C. Tsai, and William W.-G. Yeh; 134 (1), 3-13 (2008).

Tubaltzev, Ariel

Ant Colony Optimization for Least-Cost Design and Operation of Pumping Water Distribution Systems — Avi Ostfeld and Ariel Tubaltzev; 134 (2), 107-18 (2008).

Uber, James G.

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Ulanicki, B.

Modeling the Efficiency and Power Characteristics of a Pump Group — B. Ulanicki, J. Kahler, and B. Coulbeck; 134 (1), 88-93 (2008).

VanBriesen, Jeanne M.

Sensor Placement and Optimization Criteria Dependencies in a Water Distribution System — Shannon L. Isovitsch and Jeanne M. VanBriesen; 134 (2), 186-96 (2008).

Identifying Sets of Key Nodes for Placing Sensors in Dynamic Water Distribution Networks — Jianhua Xu, Paul S. Fischbeck, Mitchell J. Small, Jeanne M. VanBriesen, and Elizabeth Casman; 134 (4), 378-85 (2008).

Efficient Sensor Placement Optimization for Securing Large Water Distribution Networks — Andreas Krause, Jure Leskovec, Carlos Guestrin, Jeanne VanBriesen, and Christos Faloutsos; 134 (6), 516-26 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

van Zyl, Jakobus E.

Sizing Municipal Storage Tanks Based on Reliability Criteria — Jakobus E. van Zyl, Olivier Piller, and Yves le Gat; 134 (6), 548-55 (2008).

Villeneuve, Jean-Pierre

Heuristic Approach for Operational Response to Drinking Water Contamination — Annie Poulin, Alain Mailhot, Patrice Grondin, Louis Delorme, Nathalie Periche, and Jean-Pierre Villeneuve; 134 (5), 457-65 (2008).

Vogel, Richard M.

Optimal Siting of Regional Fecal Sludge Treatment Facilities: St. Elizabeth, Jamaica — Ana Martha Fernandes, Paul Kirshen, and Richard M. Vogel; 134 (1), 55-63 (2008).

Waanders, B. van Bloemen

Mixing at Cross Junctions in Water Distribution Systems. II: Experimental Study — R. G. Austin, B. van Bloemen Waanders, S. McKenna, and C. Y. Choi; 134 (3), 295-302 (2008).

Walski, Tom

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Walters, G. A.

Efficient Multiobjective Storm Sewer Design Using Cellular Automata and Genetic Algorithm Hybrid — Y. F. Guo, G. A. Walters, S. T. Khu, and E. C. Keedwell; 134 (6), 511-5 (2008).

Watson, Jean-Paul

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Werick, William J.

It's Time for Standards of Practice in Water Resources Planning — William J. Werick and Richard N. Palmer; 134 (1), 1-2 (2008).

Wiley, Matthew W.

Estimating the Impacts and Uncertainty of Climate Change on a Municipal Water Supply System — Matthew W. Wiley and Richard N. Palmer; 134 (3), 239-46 (2008).

Wu, Shengjun

Practical Remedial Design Optimization for Large Complex Plumes — Richard C. Peralta, Ineke M. Kalwij, and Shengjun Wu; 134 (5), 422-31 (2008).

Wu, Zheng Yi

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Xie, Hua

Hydrologic and Economic Implications of Climate Change for Typical River Basins of the Agricultural Midwestern United States — Hua Xie, J. Wayland Eheart, and Hyunhee An; 134 (3), 205-13 (2008).

Xu, Jianhua

Identifying Sets of Key Nodes for Placing Sensors in Dynamic Water Distribution Networks — Jianhua Xu, Paul S. Fischbeck, Mitchell J. Small, Jeanne M. VanBriesen, and Elizabeth Casman; 134 (4), 378-85 (2008).

The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms — Avi Ostfeld, James G. Uber, Elad Salomons, Jonathan W. Berry, William E. Hart, Cindy A. Phillips, Jean-Paul Watson, Gianluca Dorini, Philip Jonkergouw, Zoran Kapelan, Francesco di Pierro, Soon-Thiam Khu, Dragan Savic, Demetrios Eliades, Marios Polycarpou, Santosh R. Ghimire, Brian D. Barkdoll, Roberto Gueli, Jinhui J. Huang, Edward A. McBean, William James, Andreas Krause, Jure Leskovec, Shannon Isovitsch, Jianhua Xu, Carlos Guestrin, Jeanne VanBriesen, Mitchell Small, Paul Fischbeck, Ami Preis, Marco Propato, Olivier Piller, Gary B. Trachtman, Zheng Yi Wu, and Tom Walski; 134 (6), 556-68 (2008).

Yeh, William W.-G.

Optimization of Hedging Rules for Reservoir Operations — Ming-Yen Tu, Nien-Sheng Hsu, Frank T.-C. Tsai, and William W.-G. Yeh; 134 (1), 3-13 (2008).

Groundwater Management Using Model Reduction via Empirical Orthogonal Functions — James McPhee and William W.-G. Yeh; 134 (2), 161-70 (2008).

Improving Seawater Barrier Operation with Simulation Optimization in Southern California — Benjamin S. Bray and William W.-G. Yeh; 134 (2), 171-80 (2008).

Planning and Operation of Large-Scale Water Distribution Systems with Preemptive Priorities — Mario T. L. Barros, Renato C. Zambon, Paulo S. F. Barbosa, and William W.-G. Yeh; 134 (3), 247-56 (2008).

Yu, Hsin

Design Optimization of River Sampling Network Using Genetic Algorithms — Huei-Tau Ouyang, Hsin Yu, Chin-Huang Lu, and Yuan-Hong Luo; 134 (1), 83-7 (2008).

Yu, Yajuan

Inexact Chance-Constrained Linear Programming Model for Optimal Water Pollution Management at the Watershed Scale — Yong Liu, Huaicheng Guo, Feng Zhou, Xiaosheng Qin, Kai Huang, and Yajuan Yu; 134 (4), 347-56 (2008).

Yuan, Xiaohui

Improved Self-Adaptive Chaotic Genetic Algorithm for Hydrogeneration Scheduling — Xiaohui Yuan, Yongchuan Zhang, and Yanbin Yuan; 134 (4), 319-25 (2008).

Yuan, Yanbin

Improved Self-Adaptive Chaotic Genetic Algorithm for Hydrogeneration Scheduling — Xiaohui Yuan, Yongchuan Zhang, and Yanbin Yuan; 134 (4), 319-25 (2008).

Zaidi, Arjumand Z.

How to Include Economic Analysis in TMDL Allocation — Arjumand Z. Zaidi, Sharon M. deMonsabert, and Raed El-Farhan; 134 (3), 214-23 (2008).

Zambon, Renato C.

Planning and Operation of Large-Scale Water Distribution Systems with Preemptive Priorities — Mario T. L. Barros, Renato C. Zambon, Paulo S. F. Barbosa, and William W.-G. Yeh; 134 (3), 247-56 (2008).

Zarghami, M.

Extended OWA Operator for Group Decision Making on Water Resources Projects — M. Zarghami, R. Ardakanian, A. Memariani, and F. Szidarovszky; 134 (3), 266-75 (2008).

Zarkadoulas, N.

Urban Water Management in Ancient Greece: Legacies and Lessons — D. Koutsoyiannis, N. Zarkadoulas, A. N. Angelakis, and G. Tchobanoglous; 134 (1), 45-54 (2008).

Zhang, Yongchuan

Improved Self-Adaptive Chaotic Genetic Algorithm for Hydrogeneration Scheduling — Xiaohui Yuan, Yongchuan Zhang, and Yanbin Yuan; 134 (4), 319-25 (2008).

Zhou, Feng

Inexact Chance-Constrained Linear Programming Model for Optimal Water Pollution Management at the Watershed Scale — Yong Liu, Huaicheng Guo, Feng Zhou, Xiaosheng Qin, Kai Huang, and Yajuan Yu; 134 (4), 347-56 (2008).

Zimbra, David K.

Urban Water Demand Forecasting with a Dynamic Artificial Neural Network Model — M. Ghiassi, David K. Zimbra, and H. Saidane; 134 (2), 138-46 (2008).